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AUTHOR Wilson, Robert C.; And Others
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ABSTRACT

Results of a 3-year study of the use of consulting to improve teaching among University of California, Berkeley, faculty are presented. Ideas were obtained from excellent teachers about what they did that led students to rate them high on any of 30 questions about particular facets of their teaching. These ideas were then passed along to other faculty members who had been rated low on the same items by students in one of their classes. Selected ideas were described to these faculty in a teaching improvement consultation just before the next time they taught the same course. Ideas that interested teachers were discussed in detail. The faculty members made the decision about whether they would use a particular idea in the next offering of the course. At the end of the second offering of the course, ratings by the new group of students were obtained on the same 30-item questionnaire. Ratings before and after the consultation on the items for which 10 or more faculty had been given ideas showed statistically important positive change. Ratings of overall teaching effectiveness were also compared. Appendices include: a student description of teaching questionnaire; a faculty self-description of teaching questionnaire; sample individual teacher description profile, a sample of 26 ideas, and information on the faculty sample. (Author/SW)

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USING CONSULTATION TO IMPROVE TEACHING

Robert C. Wilson

with the assistance of
David Douglas
Dale Harrington

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Teaching Innovation and Evaluation Services
University of California, Berkeley
February, 1984

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Executive Summary

This report describes a three-year study of the use of consulting to improve teaching among faculty members at the University of California, Berkeley. The method used was to obtain ideas from excellent teachers about what they did that led students to rate them high on any of thirty questions about particular facets of their teaching (e.g., Gives lectures that are easy to outline; Encourages class discussion; Knows whether the class is understanding him/her). These ideas were then passed along to other faculty teachers who had been rated low on the same items by students in one of their classes. Selected ideas were described to these faculty in a teaching improvement consultation just before the next time they taught the same course. Ideas they expressed interest in were then discussed with them in some detail. The faculty members themselves made the decision about whether they would use a particular idea in the next offering of the course.

Towards the end of the second offering of the course, ratings by the new group of students were obtained on the same thirty item questionnaire. Ratings before and after the consultation on the items for which 10 or more faculty had been given ideas showed statistically important positive change.

Ratings of overall teaching effectiveness were also compared. Of the 46 courses for which we had complete data, 24 showed significant positive change, 13 showed no change, and 9 showed negative change.

Beginning faculty members continue to need help in learning how to teach. It is clear that the teaching consultation process does help faculty gain knowledge of alternative ways to teach. It also provides the structured opportunity for faculty members to take time from their busy schedules to spend on improving their teaching.

Acknowledgments

We wish to thank the many Berkeley faculty members who participated in this study. They supplied both the questions and the answers.

We thank Vice Chancellor Laetsch and former Associate Vice Chancellor Riley for their support and encouragement in our efforts to develop procedures that would go beyond evaluating teaching to providing tangible help to faculty members who wanted new ideas to use in their teaching. We are especially indebted to Carol D'Onofrio who as Chairperson of the Council for Educational Development provided the kind of support we needed whenever the going got tough.

We thank President David Saxon of the University of California for a two-year grant that assisted us in carrying out a recommendation of the Task Force on Teaching Evaluation of the University. Recommendation nine suggested that campuses "provide... services designed to link the results of [teaching] evaluations with ways of improving instruction."

We express our thanks to David Douglas for his dedicated and creative efforts with the UNIX word-processing system in storing the ideas in easily retrievable form and to Dale Harrington for designing a database of information about the faculty samples used in the study. He also suggested procedures to be used in analyzing data and carried out the data analysis.

USING CONSULTATION TO IMPROVE TEACHING

Most beginning Berkeley faculty members, like beginning faculty members at any university, are in the early stages of learning to teach. In the process, they often have questions about how to handle some aspects of teaching, e.g. "One of my students repeatedly asks questions that disrupt the class. How can I stop him without putting him down?"

It is usually difficult for faculty to get ideas about ways to handle such teaching problems. He/she is usually reticent about asking a colleague or the department chairperson. It's hard to ask people for help in an area as central as teaching, particularly when they will be involved in later decisions about your career.

Evidence of effective teaching is a part of the documentation needed for promotion at the University of California. In 1969, President Charles Hitch issued a revised "Instructions to Appointment and Promotion Committees" requiring the submission of evaluations of the candidate's teaching including evaluations by students (Appendix L).

President Hitch's instructions and related statements led to a series of efforts by the University directed towards improving teaching and instruction. In 1970 the Regents of the University of California established a fund to be used for instructional improvement projects on the nine campuses. In 1972 a $1,000,000 line item for improving undergraduate instruction was added to

the University's budget by the state legislature.

Also, in 1972 the Berkeley campus of the University established the office of Teaching Innovation and Evaluation Services (TIES). The purposes of that office are to assist faculty members, departments and schools in their efforts to innovate, evaluate and improve instruction.

In the summer of 1979, Lynn Wood, Barbara Davis and I (1) decided to make an active effort to give direct help to faculty in improving their teaching. We chose as our procedure a consultation process that gave faculty members good ideas about those aspects of their teaching on which students gave them lower ratings.

The consultation idea was borrowed from a study done by Keith Jacoby (1976) at the School of Pharmacy, University of San Francisco. Jacoby administered 25 of the teaching evaluation items developed by Hildebrand, Wilson and Dienst (1971) to students in the classes of eight pharmacy teachers. Six weeks prior to the next time the pharmacy professor taught the course Jacoby held a half-hour consultation with four faculty. He found significant improvement for those faculty consulted with and no improvement for the control group.

We decided to build upon the idea of consulting with faculty so

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1 Lynn Wood was Assistant Director of TIES. Barbara Davis was Assistant Research Psychologist at TIES. Robert Wilson was Research Psychologist and Director of TIES.

they might learn about new things they could do in their teaching. In considering the essential requirements for a successful consultation process we decided that:

1. The help should be easily accepted by Berkeley faculty members.
2. The help should be easily put into practice by faculty.
3. The help should be easily given by the consultants.

The preceding requirements have shaped the form that the Teaching Evaluation Consultation Service (TECS) has taken, that is:

1. The help should be easily accepted by Berkeley faculty members has meant:
   - Participation in TECS is voluntary (i.e., the decision to participate or not is made by the faculty member).
   - Ideas for good teaching are derived mainly from colleagues rather than the professional educational literature.
   - The decisions about which ideas to put into practice are made by the faculty client.
   - The consultant is not in a "line" relationship to the faculty member's advancement.
   - The initial development of the service has been done by emphasizing that Berkeley faculty members are assisting us with our research into the consultation process.
   - Participation in the consultation process is treated as confidential.
2. The help should be easily put into practice by faculty has meant:
   - Emphasis on short concrete ideas that are definite enough that faculty members can easily adapt them to a particular class.
   - Consultations are "tailor made" to each faculty member's teaching evaluation print-out.

- Several ideas are briefly "run by" a faculty client.
- A smaller number of these ideas are discussed in detail.

3. The help should be easily given by the consultants.

- The consultant should not have a personal stake in a faculty client's acceptance of a particular idea.
- It should not be necessary for the consultant to be expert in a client's field.
- The consultant must be clear that the decision to use an idea is the faculty member's.
- There must be no condescending or patronizing element in the offer to help.

I. METHODS

The material which follows reports the results of a three-year research study designed to determine whether the consultation process led to outcomes that documented its effectiveness in helping faculty improve their teaching. Ninety-six faculty members participated as clients. The results reported are for 45 faculty teaching 46 courses for which we had complete before and after teaching evaluation data.

A. Getting the ideas from excellent teachers

Wood, Davis and I wanted to get a set of ideas of good things for a faculty member to do in his/her teaching that would also be keyed to improving specific aspects of teaching. To accomplish this, we invited two samples of acknowledged excellent teachers on the Berkeley campus to help us with our study (Appendix A). The two samples included former recipients of the campus's Distinguished Teaching Award still teaching on the campus, as well as faculty members who received multiple nominations in a survey of graduating seniors in the spring of 1978 in response to the questions:

> "Please name the one faculty member who was the best teacher you had at Berkeley."
>
> and
>
> "Name the one faculty member from whom you learned the most during your studies at Berkeley. (This may or may not be the faculty member who was the best teacher.)"

Parenthetically, we were gratified to find that most of the former Distinguished Teaching Award recipients who had exposure to undergraduates were included among the faculty nominated by seniors.

As requested in the letter of invitation, members of the excellent teacher sample agreed to our administering an end-of-course questionnaire to students in one of their classes. They also filled out a questionnaire rating their own perceptions of their teaching.

The Student Description of Teaching questionnaire (Appendix B) asks students to describe 30 aspects of the teaching in a particular class using a 5 point scale with 1 meaning "Not at all Descriptive" and 5 meaning "Very Descriptive". In addition, it asks for ratings of the overall effectiveness of the teaching and the worthwhileness of the course. It also includes open-ended questions asking for details of the strengths and weaknesses of the course, the teaching and suggestions for change.

The Student Description of Teaching questionnaire was adapted from one developed in a three-year study of the qualities that make teaching excellent conducted for the Davis campus of the University of California (Hildebrand, M., Wilson, R.C., & Dienst, E.R.,1971). Items were drawn from each of the five factors identified in that study and other items were included that discriminated between excellent and poor teachers in an item-analysis study.

The five teaching factors represented include: Organization and Clarity; Analysis/Synthesis; Teacher-Student Interaction; Teacher-Group Interaction; and Dynamism/Enthusiasm.

Organization/Clarity is defined by such items as: Explains clearly; Identifies what he/she considers important.

Analysis/Synthesis includes such items as: Discusses points of view other than his/her own; Contrasts implications of various theories.

Teacher-Student Interaction is defined by items such as: Is accessible to students out of class; Has genuine interest in students.

Teacher-Group Interaction is defined by items such as: Encourages class discussion; Knows if the class is understanding him/her or not.

Dynamism/Enthusiasm is defined by items such as: Is enthusiastic about his/her subject; Has an interesting style of presentation.

A deliberate effort was made to include a diversity of items so that the questionnaire would include statements that are relevant to a diversity of types (lecture, discussion, laboratory and studio), sizes (large, medium and small), and levels of classes (lower division, upper division and graduate).

The student questionnaire was administered in either the first or last fifteen minutes of a class meeting during the ninth or tenth week of a ten week term. The questionnaire was administered by the consultants themselves.

Faculty members whose classes were being used were asked to leave the class while the student questionnaire was being administered. They were also asked to fill out a Faculty Self-Description of Teaching questionnaire (Appendix E). This

questionnaire consisted of the same 30 items included on the student questionnaire except phrased in the first person (e.g., "In teaching this course I: Discuss points of view other than my own" rather than "In teaching this course he/she: Discusses points of view other than his/her own"). The faculty questionnaire also asks about how many times the faculty member has taught the course and other information about the course.

After the end of the term an appointment was made for an interview with each excellent teacher. Thirty-nine excellent teachers were interviewed. The interviews focussed on the 6-8 items that students rated as most descriptive of the faculty member's teaching.

The question asked of faculty was "Can you think of anything you do that would lead students to say that it is very descriptive of your teaching that you: (the item stem was inserted here; e.g., Explain clearly; Encourage class discussion)?"

An example of the interview style follows. An excellent teacher in Physics was given a mean rating of 4.8 on a 5 point scale on item 15; Knows if the class is understanding him/her or not. The ensuing dialogue was something like the following:

"Can you think of anything you do that would lead students to say that it is so descriptive of your teaching that you know if the class is understanding you?"

(a brief reflective pause)

"Yes. It's probably because of my minute papers."

"What's a minute paper?"

"Well, I give my students about a minute to write answers to two questions. Four or five times during the term I come to class five minutes early. I write two questions in the corner of the board:

1) What is the most significant thing you learned today?

2) What question is uppermost in your mind at the end of this class session?

Then I go ahead and give a 49 minute presentation. One minute before the bell rings I tell the students to take out a piece of paper, sign it, and answer the two questions in one minute. When the bell rings I ask them to pass their papers to the aisle. I walk down the aisle and pick them up. I originally started this as a meaningful way of taking attendance and would simply give the papers to my reader to check off the names. Later, I started reading the papers and they, of course, do provide excellent feedback on whether the students are understanding and whether there are important questions to which I should respond."

There are, of course, other benefits from using "minute papers":

- It requires more active listening from students.
- It helps in identifying students who are in need of special help or who may lack adequate preparation for the course.
- Our informant also tells us that it improves students writing. Responses during the last weeks of a class are longer and more articulate than those during the early weeks.
- Relatedly, this also helps document for students that they are indeed learning something in the course.

B. Giving the ideas to client teachers

The second and experimental phase of the study required: 1) recruiting client teachers; 2) developing a consultation process for passing along the good ideas obtained from excellent teachers to client teachers and 3) determining whether this process was associated with positive change in teaching.

1) Recruiting Client Teachers

In recruiting potential clients, we used several methods to publicize the availability of our new Teaching Evaluation Consultation Service.

In the Fall of 1979 we met in a series of small two-hour seminars with 30 department chairpersons to describe the proposed service. We asked them to refer faculty from their departments who would be willing to help us test the consultation process. In addition, during 1980-81 we sent memos to 120 faculty inviting them to participate in the consultation study (Appendix B). During 1981-82 we were particularly interested in learning about the experience of teaching large freshman and sophomore courses. Invitations were sent to faculty teaching lower division courses.

Ninety-six faculty members participated as clients during the period from Fall 1979 to Summer 1982. At the time this experimental period was terminated, we had complete before and after teaching evaluation data on 45 faculty teaching

46 courses. The data analysis results are from this sample. For the other 51 faculty data were incomplete. Either they were still participating in the service or they had terminated before final data could be collected. Fourteen of the 45 client faculty wished to continue with an additional consultation period. A third set of teaching evaluations was gathered at the end of the third offering of their course. Further data on client faculty characteristics are presented in Appendix K.

2) The Teaching Improvement Consultation Process

In our efforts to help faculty members improve their teaching:

We administered an end-of-course Student Description of Teaching questionnaire (Appendix D) at the end of the current offering of one of their courses. (Time 1 assessment).

We had the faculty member fill out, at the same time, a Faculty Self-Description of Teaching questionnaire (Appendix E) which includes the same questions worded in the first person.

We sent to the faculty member his/her computer printout (Appendix F), student questionnaires and self-description questionnaire. The covering letter for this mailing asked for a preliminary consultation to be held 2-3 weeks after the term ended.

a) The preliminary consultation

At the preliminary session (1/2 hour), results of the student teaching evaluation were discussed briefly. The faculty member was asked about what questionnaire items he/she would like the consultant to find good ideas. The faculty member was asked when he/she would be teaching the course again and a tentative appointment was made for the main consultation.

b) Preparing for the main consultation

The main consultation occurred two to four weeks before the next time the faculty member taught the same course, when he/she was preparing for the course. In almost all instances this occurred just before the same quarter one year later.

In preparing for this session, the consultant studied the computer printout (Appendix F) which summarized the previous teaching evaluation. The consultant picked the three highest items and the three to five lowest items to be used in the consultation.

The open-ended responses from individual student questionnaires were also read for the additional information they provided about the strengths and weaknesses of the client's teaching.

Bearing in mind the discipline, mode of course, size and level of course, the consultant next examined the ideas in our idea book that were keyed to the particular items on which a client wanted help (Appendix I).

The ideas for particular items had been obtained previously in interviews with teachers rated high on the item. Ideas that seemed promising for the particular client to use were selected by the consultant.

c) Conducting the main consultation

The consultant started by reminding the client about the nature and purpose of the study. Reference was also made to the previous feedback session.

To begin the session on a positive note, the client was interviewed for ideas about his/her three highest items in the same way that members of the excellent teacher sample had been. Ideas that seemed useful were added to the idea book.

The three to five items that students said were least descriptive of the clients' teaching and in which he/she had expressed interest were considered one at a time. The consultant described to the client the 6-12 possible ideas he/she had selected from the idea book for an item (Appendix I). The two or three ideas that the client expressed most interest in were discussed in fuller detail and xerox copies of one-page descriptions of the

ideas were left with the client.

In our consultations, we gradually became aware of certain verbal and non-verbal behaviors of faculty. These behaviors seemed likely to be related to whether a faculty client would indeed make a change in his/her teaching. Our awareness of these cues came too late in the study for us to investigate their predictiveness in a formal way. We mention them here as hypotheses that could be investigated in future studies.

Most of the consultations were held in the faculty member's office. Cues that seemed positive were that the faculty client:

- Had notes from the earlier debriefing session on the table or nearby
- Had a draft of a syllabus for the next term's offering of the class and brought it into the discussion during the consultation
- Had a draft of the reading list for the next term's offering of the class and brought it into the discussion during the consultation
- Had paper and pencil for taking notes during the consultation
- Took notes during the consultation
- Mentioned specific ways of using or adapting an idea to the particular class
- Thanked the consultant or in other ways made it seem that the consultation session had been stimulating and idea-generating

d) Follow-up letter

During the next few days, the consultant wrote a letter summarizing the consultation (Appendix J). It was sent to the client along with a second set of the one-page descriptions of selected ideas. It was hoped that the letter would reinforce adoption or adaptation of some of the ideas and affirm the consultant's availability to give further help.

e) Friendly phone calls

During the term following the consultation, the consultant called the client once or twice to ask "How are things going?" Occasionally the consultant would give additional ideas.

f) Other things we did

For most faculty clients, the debriefing session, the main consultation and the friendly phone calls were all the help that was given. A few faculty received additional consultations or other kinds of help. For example, for a few faculty who requested it, we did observations of their classroom performance and discussed it with them afterwards. A few faculty asked us to do mid-quarter student evaluations for them. They used these as feedback from students about how things were going. This enabled them to make changes that would benefit their current set of students.

g) Time 2 assessment

At the end of the second offering of the course the Student Description of Teaching questionnaire was administered a second time. The faculty member also filled out a second version of the Faculty Self-Description of Teaching questionniare. These provided post-test data.

h) Time 3 assessment

As mentioned earlier, 14 of the 45 client faculty wanted to continue with an additional consultation period. A third set of teaching evaluations was gathered at the end of the third offering of their course (Time 3).

3) Feedback of results to faculty

The analyses of the resulting data are presented in the next section. However, something should be said about how faculty were informed of the results and how decisions were made about whether to continue or terminate consultations.

After the end of the second offering of the course, the consultant scheduled a follow-up consultation with the faculty member to discuss the results from time one to time two. As an aid to this we developed a Change Comparison Sheet (Appendix H).

At this final consultation the changes in mean ratings that had occurred on any of the 30 individual items were discussed. Where item means changed importantly in either a

positive or negative direction, clients were asked about their interpretations of the meaning of the changes.

A change was defined as statistically important change if it equaled or exceeded 1/10 of a standard deviation (Cohen, 1977). Changes on the overall teaching effectiveness scale were also discussed.

The question about whether the faculty member wanted to continue with additional consultation or to stop was also examined. In all but 14 cases, the consultation process was discontinued either because the faculty member was satisfied or because of other reasons (e.g. sabbatical, not teaching the course again, etc.). In 14 cases, the faculty client decided that he/she would like to continue with consultation for another time period, usually because the faculty member was dissatisfied with his/her progress during the first time period. For these clients the entire process was repeated for a second time period.

II. RESULTS AND DISCUSSION

A) Student Description of Faculty's Teaching Before Consultation

One of the questions we have been asked is what kind of faculty teacher makes use of the consultation service, "Do the teachers who really need help make use of your service?" A partial answer to the question can be seen in the frequency distributions presented in Table 1 (see next page).

Students were asked to describe the overall teaching effectiveness of their instructor on a 7-point scale (1 = Not at all effective .... 7 = Extremely effective). The frequency distribution of the mean class ratings is shown in Table 1. The mean of the distribution is 5.2 and the distribution is skewed with none of the class means being below 3.0.

The mean of this distribution is comparable to the means of student ratings of overall teaching effectiveness found in other departments using the same item. The resulting means are shown in Table 2 (see page 20). As can be seen the results are about the same except for Forestry. The department of Forestry places unusual emphasis on teaching excellence.

Table 1

Distribution of Mean Ratings
of Overall Teaching Effectiveness
of Client Faculty

Mean Ratings	N	Percentage
1.0-1.4	0	0
1.5-1.9	0	0
2.0-2.4	0	0
2.5-2.9	0	0
3.0-3.4	1	2
3.5-3.9	2	4
4.0-4.4	3	7
4.5-4.9	12	26
5.0-5.4	9	20
5.5-5.9	11	24
6.0-6.4	7	15
6.5-6.9	1	2
Total	46.0	100
Mean	5.2	
Median	5.1	
Standard Deviation	0.74	

Table 2

Mean Overall Teaching Effectiveness Ratings

Department	$\bar{X}$	N
Business Administration	5.1	118
Sociology	5.2	18
Optometry	5.3	16
Forestry	5.8	9
TECS Clients	5.2	45

All department data for Spring 1982.

B) Changes in Students' Description of Faculty's Teaching After Consultation

Differences from Time One (T1) to Time Two (T2)

We were interested in determining whether giving ideas for improving particular aspects of teaching was associated with positive change in student ratings of a teacher's behavior. We gave ideas to teachers for improving on particular items (i.e. Explains clearly, Summarizes major points, Knows when students are bored).

After the students described the client's teaching performance at a second time point, a statistical importance test (Cohen, 1977) was performed on changes in the mean ratings from time one to time two. The hypothesis of our study was that there should be statistically important improvement from the first time the course was taught to the second time on the mean ratings for the items in the Student Description of Teaching for which ideas were given.

Results of the tests for the statistical importance of changes from time one to time two for 46 classes are presented in Table 3 (see next page).

Table 3 indicates that among the items for which suggestions were given to at least ten faculty members, some resulted in a large number of faculty making positive changes. For one item

Table 3

Statistical Importance of Cha nges from Time One to Time Two

Item No.	Change: Decrease	No Change	Increase	Total Classes
6. Explains clearly.	2 (18%)	3 (27%)	6 (55%)	11
8. Gives lectures that are easy to outline.	3 (21%)	2 (14%)	9 (65%)	14
10. States objectives for each class session.	1 (10%)	0	9 (90%)	10
12. Encourages class discussion.	5 (38%)	2 (15%)	6 (47%)	13
15. Knows if the class understands.	8 (26%)	8 (26%)	15 (48%)	31
17. Knows when students are bored.	5 (24%)	6 (28%)	10 (48%)	21
22. Has an interesting style of presentation.	3 (20%)	3 (20%)	9 (60%)	15
24. Varies the speed and tone of his/her voice.	4 (22%)	7 (39%)	7 (39%)	18
26. Motivates students to do their best work.	2 (18%)	3 (27%)	6 (55%)	11
30. Keeps students informed of their progress.	3 (30%)	1 (10%)	6 (60%)	10
Overall Teaching Effectiveness	9 (20%)	13 (28%)	24 (52%)	46

Note: Other items were omitted because fewer than ten clie[illegible] were given suggestions on those items.

A statistically important change was considered an increase or decrease in mean score from time one to time two of at least 1/10 of a standard deviation.

only 39 percent of faculty showed positive change. For most of the items a moderate proportion of faculty showed positive change.

Ninety percent of the faculty obtained changes in the positive direction on the item "States objectives for each class session." The suggestion for improving this item is self-evident in the statement of the item.

Sixty-five percent of faculty obtained positive changes on the item "Gives lectures that are easy to outline." The kinds of suggestions given to faculty to help them improve their teaching included:

"Outline your lecture on the blackboard as it develops."

"Structure a lecture as you would a journal article."

"Organize your lecture into 10-minute segments."

All of these suggestions are quite behavioral or concrete. They do not take any special flair or self-insight to put into practice. This finding and this interpretation suggests that the more behavioral, specific and concrete a suggestion is, the more easily it can be implemented by a teacher and the more likely it will be to affect students' perceptions of his/her teaching.

This interpretation is somewhat supported by the relatively smaller impact on positive change which resulted from suggestions given relative to item #24, "Varies the speed and tone of his/her voice." (Only 39% of faculty showed positive changes. The remaining 61% showed no change or a negative

change.) The suggestions which were given for improving ratings on this item include:

> "Build deliberate and purposeful pauses into your lectures."
>
> "Vary the pitch or inflection of your voice."
>
> "Color-code your lecture notes with cues to 'slow down,' 'pause and get attention,' 'demonstrate with gestures,' or other stage directions."

These suggestions necessitate teachers being able to regard their verbal and nonverbal behavior objectively, and being able to vary it at will. These are acting or self-presentation skills that some faculty members may not possess.

Four items showed statistically important change for at least 60% of the teachers who were given suggestions for them. These are:

> Item 8. Gives lectures that are easy to outline.
>
> Item 10. States objectives for each class session.
>
> Item 22. Has an interesting style of presentation.
>
> Item 30. Keeps students informed of their progress.

All these items had suggestions which were rather more behavioral than the items which did not show positive changes. Concrete, specific, behaviorally-based suggestions, then, seem to be the most productive (effective) in assisting faculty members to improve their rated teaching effectiveness.

This project did not examine, systematically, the various elements of the consultation process, so we do not know which of its elements are the most important in producing the changes we obtained. Although we believe that the crucial element is having access to clearly stated, concrete suggestions relevant to the teaching behavior areas which teachers wish to change, we cannot be certain that this is the case. It may be that talking to sympathetic, experienced consultants about your teaching is the important element.

The results from analyses of the statistical importance of changes in ratings by students of overall teaching effectiveness are also presented in Table 3. Twenty-four of the 46 classes showed statistically important changes in their mean overall teaching effectiveness ratings. Thirteen of the classes showed no change and nine showed negative change.

Differences Between Time One (T1), Time Two (T2), and Time Three (T3)

Fourteen professors participated in the TECS project through two different consultations: one consultation occurred between the time one and time two teaching descriptions and a second consultation occurred between the time two and time three descriptions. The Kruskal-Wallis analysis of rank-order variance was used to measure differences in teaching performance for the three time points. This procedure was used because it allows us to examine the three evaluation scores at T1, T2, and T3 simultaneously which avoids problems with Type 1 errors

caused by multiple significance tests. The results of this analysis are as follows (see Table 4 on next page):

Fourteen of our faculty clients decided to continue participating in the study for a second year. Four (29%) of them had received higher ratings from their students but wanted to try out additional changes and ideas. Ten (71%) of the fourteen had showed no change or negative change in their ratings and decided to continue.

The impressions received from these ten relates to the motivation to change and how a person manages to accomplish change. The ten had implied a commitment to change by accepting our invitation to participate in a research project to "test the efficacy of the consultation process and the pool of suggested good teaching practices in improving teaching." We had deliberately made the onus on faculty participants as low as possible.

We know from our interviews with members of this group of ten that they wanted to be better teachers. They accepted the thought that by learning some good ideas they could become better teachers. Their experiences during their first year of the project did not support their expectations.

During the second year, from T(2) - T(3), eight (57%) of the faculty clients showed a positive increase in the ratings of

Table 4

Statistical Importance of Changes from Time One to Time Two to Time Three

Item	Time	Change: Decrease	Change: No Change	Change: Increase	Total Classes
verall Teaching ffectiveness	T_1-T_2	3 (21%)	7 (50%)	4 (29%)	14
	T_2-T_3	1 (07%)	5 (36%)	8 (57%)	14

Note: The contrasts in the table are between the mean on the student evaluations at one time period against the mean on the student evaluations at another time period. The exact procedure used is described by Marascuilo and McSweeney in their 1977 book, Non Parametric and Distribution-Free Methods for the Social Sciences, p. 299-318.

overall teaching effectiveness they received from their students. Only one received lower ratings of overall teaching effectiveness.

It is as though the first year's experience taught some faculty clients that knowing about new things to do was not enough. They became more active in trying some of the options they had learned about.

C) The Comparison Group

It was not seen as feasible or desirable to assign any of the faculty participants to a non-intervention control group. They had responded affirmatively to our invitation to make use of a consultation service for helping them improve teaching and we felt obligated to provide that service. We decided to use, as a comparison group, another group of faculty members who had received only the results of their student ratings.

We were encouraged in that decision by the evidence from prior studies showing that in the absence of intervention, faculty members generally show little change in the ratings they receive from students about their teaching effectiveness from one time to another.

Rotem and Glasman (1979) in a review of studies "On the Effectiveness of Students' Evaluative Feedback to University Instructors" concluded that "The main implication emerging from the present review is that feedback [..alone..] from stu-

dent ratings [as was elicited and presented to teachers in the studies reviewed] does not seem to be effective for the purpose of improving performance of university teachers."

Kulik (1977) in an article on "Students' Reactions to Instruction" commented that "Teachers have collected student reactions to college courses for over 50 years. The traditional procedures are familiar to most teachers. A student rating form, usually consisting of 10 to 40 statements, is given to a teacher by an administrator for gathering student opinion. Each statement of the form describes some characteristic of a teacher, and students are asked to indicate the degree to which the statements apply to their teacher. After grades are turned in, the teacher receives from the administrator copies of student response sheets or a class summary indicating the percentage of students endorsing each of the items.

"Several studies carried out by the Center for Research on Learning and Teaching (CRLT), University of Michigan, research scientists Wilbert McKeachie and Yi-Guang Lin have shown that this traditional means of collecting student opinion leads to little or no change in the quality of college teaching. Subsequent teaching by instructors who receive student opinion in this way is about the same as the teaching of those who receive no feedback."

To check whether this was true at our own campus, we undertook the following non-intervention study. We analyzed the records of student end-of-course evaluations of teaching in one of the

Schools that for the last ten years has been using the original questionnaire on which our questionnaire was based (23 of the items are identical).

The faculty members used were in the same situation as our faculty clients in that:

1) each time they taught a particular course it was evaluated by students at the end of the course;

2) a few weeks later they received a computer printout summary of results (like those in Appendix F);

3) they also received the original student questionnaires at that time including student comments about the strengths and weaknesses of the course.

Two things are different about the comparison sample:

1) they did not receive any ideas they might use to improve items on which they were rated low,

2) they did not self-select themselves into the situation of agreeing to be helped to improve their teaching.

For the period Fall, 1979 through Spring, 1982, the same period as the TECS study, we selected 101 courses that were taught twice by the same faculty member during that time period. We compared the mean ratings received at time one with the mean ratings received from students at time two on 23 of the specific items that were the same on the two questionnaires. The resultant changes in mean difference on all 23 questions were zero ranging from -.06 to +.13 with none of them being significant.

We also compared time one (T1) student ratings with time two (T2) student ratings on the overall evaluation question: "Considering both the limitations and possibilities of the subject matter and course, how would you rate the overall teaching effectiveness of this instructor?" The difference in means between (T1 - T2) = -.01 with a standard error of the difference of .09.

Essentially there is no difference without intervention. One might conclude that faculty members tend to teach a course pretty much the same way from occasion to occasion as seen by students.

III. CONCLUSIONS AND INTERPRETATION

The data reported indicate that:

1) The consultation process was associated with statistically important change in overall teaching effectiveness ratings for 52 percent of the faculty clients.

2) Half of the faculty clients showed positive change on 9 of the 10 items for which suggestions were given to at least 10 faculty.

3) The less complex and more concrete items were the ones on which the greatest number of faculty showed statistically important change.

4) One third of the participants elected to continue in the consultation study for an additional time period. Approximately one third of them showed statistically important change from T1 to T2. Over half of them showed change from T2 to T3.

5) A group of 101 faculty received the computer profiles of the Student Description of Teaching plus the original questionnaires. They received no suggestions about things they might do to improve their teaching and showed no significant change in the ratings of their teaching they received from students on two different occasions.

It is interesting to speculate about the factors that may have been important in leading to change in faculty clients' ratings.

In looking at the processes by which faculty members effect real improvement in their teaching, it is useful to consider two aspects of the change process separately:

1) One aspect is knowing what to do. Does a faculty member know about other options or ideas? For example, if a faculty member is having difficulty in getting student participation in class discussion, does the faculty member have knowledge of alternatives that would lead to increased student participation. Probably not, unless he/she is given a chance to gain knowledge about alternative ways of doing things. This is one of the ways in which the TECS project has functioned. It has focussed on helping faculty to learn additional ways of doing things in their teaching - ways that they didn't know about before.

2) A second aspect of change is being able to actually do the something different that you have knowledge of. Knowing better ways to do things doesn't mean a person will be able to do them. Knowing that if you give up smoking you may increase your life span doesn't make it easy to give up smoking. Knowing that if you don't drone you will improve your teaching doesn't make it easy to vary the speed and tone of your voice. It's this second aspect of change with which it seems most difficult to help faculty.

It may be, however, that interpersonal expectations established in the consultation sessions create for some faculty a desire to fulfill an implied contract with their consultant. It is certainly true that the consulting process sets up a situation for producing change that isn't set up by merely sending faculty members a book of good ideas along with their Student Description of Teaching results. Making an appointment and spending an hour talking with a teaching consultant about concrete ideas gives structure and impetus to a faculty member's taking steps to improve teaching. The first step was taken when the appointment was made.

During 1983-84, we have been experimenting with alternative procedures for helping faculty learn about good ideas they can use in their teaching. We have had a group of five Emeritus Teaching Consultants working with ten client faculty using the same procedures described here. In addition, we have had five faculty who did not receive consultation but did receive a copy of the same book of good ideas that the consultants used. The results of this study will be reported in Emeritus Teaching Consultants Help Improve Teaching (in preparation). The faculty members who received consultation from the Emeriti showed significantly greater improvement in their teaching as rated by students than did faculty members who just received the book of good ideas to use by themselves.

References

Cohen, J., Statistical Power Analysis for the Behaviorial Sciences. Rev. Edit. New York: Academic Press, 1977.

Hildebrand, M., Wilson, R.C., & Dienst, E.R., Evaluating University Teaching, Center for Research and Development in Higher Education, University of California, Berkeley, 1971.

Jacoby, K.E., Behavioral prescriptions for faculty based on student evaluations of teaching. Am. J. Phar. Educ., 1976, 40, 8-13.

Kulik, J.A., Student reactions to instruction. In S.C. Scholl and S.C. Inglis (Eds) Teaching in Higher Education. Ohio Board of Regents, 1977.

Marascuilo, L. and McSweeney M., Non-Parametric and Distribution-Free Methods for the Social Sciences. Belmont, Ca.: Wadsworth, 1977.

Rotem, A. and Glasman, N.S. On the effectiveness of student's evaluative feedback to University instructors. Review of Educational Research, 1979, 49(3), 497-511.

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Appendix A

Letter of Invitation to Excellent Teachers

TEACHING INNOVATION & EVALUATION SERVICES
(TIES)
262 Stephens Hall

Dear:

The TIES staff invites you to take advantage of one of its services designed to assist faculty members in improving instruction. This service involves using student evaluations of teaching as diagnostic, self-improvement tools, linking student ratings on particular questionnaire items with specific, concrete suggestions for improvement.

Your participation would consist in:

1) Selecting a course which you would like to have evaluated this year.

2) Permitting us to come into one of your class sessions during the eighth through tenth weeks to administer the attached teaching evaluation questionnaire to your students (this takes about 15 minutes). If your course is especially large, the questionnaire can be administered in a sample of section meetings if you prefer. Summary results as well as student comments will be returned to you within a few weeks.

3) Meeting with one of us to discuss the concrete things you do that may lead students to rate certain questionnaire items as especially descriptive of your teaching. The interview will be scheduled at your convenience after the end of the quarter.

   During the same interview, we will also relay information on the specific things that other teachers do that lead them to receive high ratings on any items of special interest to you (for example, what others do to "explain clearly", No. 6 on the questionnaire.

4) Agreeing to have the course re-evaluated the next time you teach it to see if the suggestions you adopt improve your student ratings on relevant questionnaire items.

We began this project in the summer of 1979. To date, close to 100 UCB faculty members in a wide variety of disciplines have participated, both contributing and receiving many useful ideas and teaching tips. We hope that you will find the project both interesting and worthy of your participation.

Sincerely,

Robert C. Wilson Lynn Wood Barbara Gross Davis

Robert C. Wilson Lynn Wood Barbara Gross Davis

If you would like to participate, please fill out the attached form and return it to the TIES office, 262 Stephens Hall. If you have any questions about the project or would like to discuss your participation before deciding to participate, please give any one of us a call at 642-6392 or 642-1811.

Appendix B

Letter of Invitation to Client Teachers

TO: UCB FACULTY

FROM: ROBERT C. WILSON, DIRECTOR, TIES

RE: NEW TEACHING EVALUATION-CONSULTATION SERVICE

Beginning 1979-80, the TIES staff will be offering a new teaching evaluation and consultation service designed to help faculty members make more effective use of student end-of-course evaluations in improving their teaching. This new service links the ratings which students give a faculty member on particular questionnaire items with specific, concrete suggestions for improvement.

These suggestions are being gathered in a series of interviews with 100 faculty members known to be excellent teachers (e.g., recipients of Distinguished Teaching Awards). In these interviews, faculty members are being asked to describe what they think they do that leads students to give them high ratings on specific items or variables on a standardized student end-of-course evaluation form.

We would like to invite you to participate in the research phase of this new service. We hope to involve faculty members from a variety of disciplines who teach courses of various sizes, levels, and types (e.g., seminars, lectures, laboratories).

Your participation would consist of:

1) Selecting one course which you would like to have evaluated this Fall, Winter, or Spring Quarter. The questionnaire will be administered in the 9th or 10th week of classes and will take approximately 15 minutes. While students are filling out their forms (see yellow attachment), you will be asked to complete a parallel self-evaluation form (see green attachment). Summary results, as well as student comments, will be returned to you within a few weeks.

2) Consulting with a member of the TIES staff for 30-45 minutes about your highest and lowest ratings a week or two before the next time you teach the course. During this meeting, the consultant will "relay" specific suggestions for improving your lowest ratings and/or the items which you have indicated you would most like to improve. All aspects of the evaluation and consultation will be kept strictly confidential.

3) Agreeing to have the course re-evaluated the next time you teach it to see if the suggestions you have adopted have helped to improve your student ratings on relevant questionnaire items.

The ultimate aim of the project is to test the efficacy of the consultation process and the pool of suggested good teaching practices in improving teaching. If successful, the consultations will become an ongoing service of TIES and the evaluation form with suggestions keyed to individual items will be incorporated into a handbook for those faculty members who would prefer to use them in a self-study approach.

We hope that you will find the project both interesting and worthy of your participation.

If you would like to participate, please fill out the attached form and return it to the TIES office.

Appendix C

Invitation Return Form

TO: ROBERT C. WILSON, LYNN WOOD, AND BARBARA DAVIS
Teaching Innovation and Evaluation Services (TIES)
262 Stephens
Campus

FROM: _____

____ I am interested in participating in your research project on the evaluation and improvement of teaching, Fall Quarter.

The best time to administer the forms in my class is:

Date: November ; Day of Week: _____

Time: _____(The first 15 minutes of class)

_____(The last 15 minutes of class)

The course is: _____

It meets in Room _____, _____ Hall.

The number of students enrolled is _____.

____ I am interested in participating in your project, but the course for which I would like to have an evaluation-consultation will be taught:

_____Winter Quarter. Please contact me at that time.

_____Spring Quarter. Please contact me at that time.

____ I prefer to talk to one of you before agreeing to participate in the project. The best times to reach me are:

Days of week: _____

Hours: _____

____ I do not wish to participate in the research project this year.

Appendix D

Student Description of Teaching Questionnaire

D-1 Typescript version
D-2 Optically scanned version

Appendix D-1

STUDENT DESCRIPTION OF TEACHING

Department_____

Instructor_____Course Number_____ _____Quarter,19___

I. The following items reflect some of the ways teachers can be described. For the instructor named above, please circle the number which indicates the degree to which you feel each item is descriptive of him or her. In some cases, the statement may not apply to this individual. In these cases, check Doesn't apply or don't know.

Responses will not be returned to the instructor until after final grades have been given.

	Not at all Descriptive				Very Descriptive	Doesn't apply or don't know	
1. Discusses points of view other than his/her own.....	1	2	3	4	5	( )	(47)
2. Contrasts implications of various theories.....	1	2	3	4	5	( )	
3. Discusses recent developments in the field.....	1	2	3	4	5	( )	
4. Gives references for more interesting & involved points.....	1	2	3	4	5	( )	
5. Emphasizes conceptual understanding.....	1	2	3	4	5	( )	
6. Explains clearly.....	1	2	3	4	5	( )	
7. Is well prepared.....	1	2	3	4	5	( )	
8. Gives lectures that are easy to outline.....	1	2	3	4	5	( )	
9. Summarizes major points.....	1	2	3	4	5	( )	
10. States objectives for each class session.....	1	2	3	4	5	( )	
11. Identifies what he/she considers important.....	1	2	3	4	5	( )	
12. Encourages class discussion.....	1	2	3	4	5	( )	
13. Invites students to share their knowledge and experiences.....	1	2	3	4	5	( )	
14. Invites criticism of his/her own ideas.....	1	2	3	4	5	( )	
15. Knows if the class is understanding him/her or not...	1	2	3	4	5	( )	(61)
16. Has students apply concepts to demonstrate understanding.....	1	2	3	4	5	( )	
17. Knows when students are bored or confused.....	1	2	3	4	5	( )	
18. Has genuine interest in students.....	1	2	3	4	5	( )	
19. Gives personal help to students having difficulties in course.....	1	2	3	4	5	( )	
20. Relates to students as individuals.....	1	2	3	4	5	( )	
21. Is accessible to students out of class.....	1	2	3	4	5	( )	
22. Has an interesting style of presentation.....	1	2	3	4	5	( )	
23. Is enthusiastic about his/her subject.....	1	2	3	4	5	( )	
24. Varies the speed and tone of his/her voice.....	1	2	3	4	5	( )	
25. Has interest in and concern for the quality of his/her teaching.....	1	2	3	4	5	( )	
26. Motivates students to do their best work.....	1	2	3	4	5	( )	
27. Gives interesting and stimulating assignments.....	1	2	3	4	5	( )	
28. Gives examinations requiring synthesis of parts of the course.....	1	2	3	4	5	( )	
29. Gives examinations permitting students to show understanding.....	1	2	3	4	5	( )	
30. Keeps students informed of their progress.....	1	2	3	4	5	( )	(76)

PLEASE TURN THE PAGE

II. 1. Considering both the limitations and possibilities of the subject matter and course, how would you rate the overall teaching effectiveness of this instructor?

Not at all effective			Moderately effective			Extremely effective	
1	2	3	4	5	6	7	77

2. Focusing now on the course content, how worthwhile was this course in comparison with others you have taken at this University?

Not at all worthwhile			Moderately worthwhile			Extremely worthwhile	
1	2	3	4	5	6	7	78

III. Are you taking this course because it is required?

(1)_____yes (2)_____no 79

IV. COMMENTS:

1. Please use this space to identify what you perceive as the real strengths and weaknesses of:

a) the course

b) the instructor's teaching

2. What improvements would you suggest?

TIES, UC BERKELEY

STUDENT DESCRIPTION OF TEACHING

DEPARTMENT _____

INSTRUCTOR _____ COURSE NUMBER _____ QUARTER, 19 ___

The following items reflect some of the ways teachers can be described. For the instructor named above, please fill in the numbered box which indicates the degree to which you feel each item is descriptive of him or her.

IF YOU HAVE NO INFORMATION OR FEEL AN ITEM DOES NOT APPLY, PLEASE FILL IN THE N/A BOX.

Responses will not be returned to the instructor until after final grades have been given.

- USE NUMBER 2 PENCIL
- ERASE COMPLETELY TO CHANGE

	Not At All Descriptive				Very Descriptive	N/A
1. Discusses points of view other than his/her own.	1	2	3	4	5	N/A
2. Contrasts implications of various theories.	1	2	3	4	5	N/A
3. Discusses recent developments in the field.	1	2	3	4	5	N/A
4. Gives references for more interesting & involved points.	1	2	3	4	5	N/A
5. Emphasizes conceptual understanding.	1	2	3	4	5	N/A
6. Explains clearly.	1	2	3	4	5	N/A
7. Is well prepared.	1	2	3	4	5	N/A
8. Gives lectures that are easy to outline.	1	2	3	4	5	N/A
9. Summarizes major points.	1	2	3	4	5	N/A
10. States objectives for each class session.	1	2	3	4	5	N/A
11. Identifies what he/she considers important.	1	2	3	4	5	N/A
12. Encourages class discussion.	1	2	3	4	5	N/A
13. Invites students to share their knowledge and experiences.	1	2	3	4	5	N/A
14. Invites criticism of his/her own ideas.	1	2	3	4	5	N/A
15. Knows if the class is understanding him/her or not.	1	2	3	4	5	N/A
16. Has students apply concepts to demonstrate understanding.	1	2	3	4	5	N/A
17. Knows when students are bored.	1	2	3	4	5	N/A
18. Has genuine interest in students.	1	2	3	4	5	N/A
19. Gives personal help to students having difficulties in course.	1	2	3	4	5	N/A
20. Relates to students as individuals.	1	2	3	4	5	N/A
21. Is accessible to students out of class.	1	2	3	4	5	N/A
22. Has an interesting style of presentation.	1	2	3	4	5	N/A
23. Is enthusiastic about his/her subject.	1	2	3	4	5	N/A
24. Varies the speed and tone of his/her voice.	1	2	3	4	5	N/A
25. Has interest in and concern for the quality of his/her teaching.	1	2	3	4	5	N/A
26. Motivates students to do their best work.	1	2	3	4	5	N/A
27. Gives interesting and stimulating assignments.	1	2	3	4	5	N/A
28. Gives examinations requiring synthesis of parts of the course.	1	2	3	4	5	N/A
29. Gives examinations permitting students to show understanding.	1	2	3	4	5	N/A
30. Keeps students informed of their progress.	1	2	3	4	5	N/A

1. Considering both the limitations and possibilities of the subject matter and course, how would you rate the overall teaching effectiveness of this instructor?	Not At All Effective	2	3	Moderately Effective	5	6	Extremely Effective 7
2. Focusing now on the course content, how worthwhile was this course in comparison with others you have taken at this University?	Not At All Worthwhile	2	3	Moderately Worthwhile	5	6	Extremely Worthwhile 7
3. Are you taking this course because it is required?						YES	NO

PLEASE TURN THE PAGE

FEED THIS DIRECTION

COMMENTS:

1. Please use this space to identify what you perceive as the real strengths and weaknesses of:

   a) the course

   b) the instructor's teaching

2. What improvements would you suggest?

Appendix E

Faculty Self-Description of Teaching Questionnaires

E-1 Before
E-2 After

Appendix E-1

FACULTY SELF-DESCRIPTION OF TEACHING

Department_____

Instructor_____Course Number_____ _____Quarter, 19___

1. The following items reflect some of the ways teachers can be described. Please circle the number which indicates the degree to which you feel each item is descriptive of your teaching in this course. In some cases, the statement may not apply. In these cases, check Doesn't apply or don't know.

In teaching this course, I:	Not at all Descriptive				Very Descriptive	Doesn't apply or don't know	
1. Discuss points of view other than my own	1	2	3	4	5	( )	(34)
2. Contrast implications of various theories	1	2	3	4	5	( )	
3. Discuss recent developments in the field	1	2	3	4	5	( )	
4. Give references for more interesting and involved points	1	2	3	4	5	( )	
5. Emphasize conceptual understanding	1	2	3	4	5	( )	
6. Explain clearly	1	2	3	4	5	( )	
7. Am well prepared	1	2	3	4	5	( )	
8. Give lectures that are easy to outline	1	2	3	4	5	( )	
9. Summarize major points	1	2	3	4	5	( )	
10. State objectives for each class session	1	2	3	4	5	( )	
11. Identify what I consider important	1	2	3	4	5	( )	
12. Encourage class discussion	1	2	3	4	5	( )	
13. Invite students to share their knowledge & experience	1	2	3	4	5	( )	
14. Invite criticism of my own ideas	1	2	3	4	5	( )	
15. Know if the class is understanding me or not	1	2	3	4	5	( )	(48)
16. Have students apply concepts to demonstrate understanding	1	2	3	4	5	( )	
17. Know when students are bored or confused	1	2	3	4	5	( )	
18. Have genuine interest in students	1	2	3	4	5	( )	
19. Give personal help to students having difficulties in course	1	2	3	4	5	( )	
20. Relate to students as individuals	1	2	3	4	5	( )	
21. Am accessible to students out of class	1	2	3	4	5	( )	
22. Have an interesting style of presentation	1	2	3	4	5	( )	
23. Am enthusiastic about my subject	1	2	3	4	5	( )	
24. Vary the speed and tone of my voice	1	2	3	4	5	( )	
25. Have interest in & concern for the quality of my teaching	1	2	3	4	5	( )	
26. Motivate students to do their best work	1	2	3	4	5	( )	
27. Give interesting & stimulating assignments	1	2	3	4	5	( )	
28. Give examinations requiring synthesis of parts of the course	1	2	3	4	5	( )	
29. Give examinations permitting students to show understanding	1	2	3	4	5	( )	
30. Keep students informed of their progress	1	2	3	4	5	( )	(63)

PLEASE TURN THE PAGE

II. 1. Prior to this quarter, how many times have you taught this course on the Berkeley campus?

_____times 64-65

2. When do you next expect to teach this course?

_____Quarter, 19_____ 66-68

3. How useful have previous student evaluations of this course been to you in improving:

	Not at all useful		Somewhat useful		Very useful	Does not apply	
a) the course content or materials	1	2	3	4	5	( )	69
b) the assignments or examination	1	2	3	4	5	( )	
c) the course structure, format or organization	1	2	3	4	5	( )	
d) the methods or approaches you use in teaching	1	2	3	4	5	( )	72

4. To what extent do you feel this course could be improved, i.e., how satisfied are you with the course as you taught it this quarter?

Very Dissatisfied Needs improvement	Somewhat Dissatisfied, could be improved	Generally Satisfied, needs little improvement	Very Satisfied, No need to improve at this time	
(1)_____	(2)_____	(3)_____	(4)_____	73

5. How would you rate this class in terms of:

	very low				very high	
a) your own personal enjoyment	1	2	3	4	5	74
b) the level of interest shown by the students	1	2	3	4	5	
c) the level of performance evidenced by the students	1	2	3	4	5	75

III. Looking at the items which you rated as not especially descriptive of your teaching in this class, which one(s) would you most like to improve, if any?

Appendix E-2

FACULTY SELF-DESCRIPTION OF TEACHING

Department_____

Instructor_____Course Number_____ _____Quarter, 19___

1. The following items reflect some of the ways teachers can be described. Please circle the number which indicates the degree to which you feel each item is descriptive of your teaching in this course. In some cases, the statement may not apply. In these cases, check Doesn't apply or don't know.

In teaching this course, I:	Not at all Descriptive				Very Descriptive	Doesn't apply or don't know	
1. Discuss points of view other than my own	1	2	3	4	5	( )	(34)
2. Contrast implications of various theories	1	2	3	4	5	( )	
3. Discuss recent developments in the field	1	2	3	4	5	( )	
4. Give references for more interesting and involved points	1	2	3	4	5	( )	
5. Emphasize conceptual understanding	1	2	3	4	5	( )	
6. Explain clearly	1	2	3	4	5	( )	
7. Am well prepared	1	2	3	4	5	( )	
8. Give lectures that are easy to outline	1	2	3	4	5	( )	
9. Summarize major points	1	2	3	4	5	( )	
10. State objectives for each class session	1	2	3	4	5	( )	
11. Identify what I consider important	1	2	3	4	5	( )	
12. Encourage class discussion	1	2	3	4	5	( )	
13. Invite students to share their knowledge & experience	1	2	3	4	5	( )	
14. Invite criticism of my own ideas	1	2	3	4	5	( )	
15. Know if the class is understanding me or not	1	2	3	4	5	( )	(38)
16. Have students apply concepts to demonstrate understanding	1	2	3	4	5	( )	
17. Know when students are bored or confused	1	2	3	4	5	( )	
18. Have genuine interest in students	1	2	3	4	5	( )	
19. Give personal help to students having difficulties in course	1	2	3	4	5	( )	
20. Relate to students as individuals	1	2	3	4	5	( )	
21. Am accessible to students out of class	1	2	3	4	5	( )	
22. Have an interesting style of presentation	1	2	3	4	5	( )	
23. Am enthusiastic about my subject	1	2	3	4	5	( )	
24. Vary the speed and tone of my voice	1	2	3	4	5	( )	
25. Have interest in & concern for the quality of my teaching	1	2	3	4	5	( )	
26. Motivate students to do their best work	1	2	3	4	5	( )	
27. Give interesting & stimulating assignments	1	2	3	4	5	( )	
28. Give examinations requiring synthesis of parts of the course	1	2	3	4	5	( )	
29. Give examinations permitting students to show understanding	1	2	3	4	5	( )	
30. Keep students informed of their progress	1	2	3	4	5	( )	(43)

PLEASE TURN THE PAGE

1. How useful were the suggestions or consultation in improving:

	Not at all useful		Somewhat useful		Very useful	Does not apply	
a) the course content or materials	1	2	3	4	5	( )	
b) the assignments or examination	1	2	3	4	5	( )	
c) the course structure, format or organization	1	2	3	4	5	( )	
d) the methods or approaches you use in your teaching	1	2	3	4	5	( )	
e) your relations with students	1	2	3	4	5	( )	
f) the course overall	1	2	3	4	5	( )	69

COMMENTS:

2. To what extent do you feel this course could be improved, i.e., how satisfied are you with the course as you taught it this quarter?

Very Dissatisfied, needs improvement	Somewhat Dissatisfied, could be improved	Generally Satisfied, needs little improvement	Very Satisfied, no need to improve at this time	
(1)_____	(2)_____	(3)_____	(4)_____	70

3. How would you rate this class in comparison with the last time you taught it in terms of:

	Much lower				Much higher	
a) your own personal enjoyment	1	2	3	4	5	71
b) the level of interest shown by the students	1	2	3	4	5	
c) the level of performance evidenced by the students	1	2	3	4	5	73

4. Looking at the items on the preceding page, are there any which you worked on specially this quarter as a result of our consultation with you before the quarter began?

Were there any other changes you made in the course?

5. How do you think your students' ratings in this course this quarter will compare with your ratings last time you taught it?

Higher_____ Lower_____ The same_____

COMMENTS:

Appendix F

Student Description of Teaching Computer Printouts

WINTER 1982 INDIVIDUAL TEACHER DESCRIPTION PROFILE

ENROLLMENT: 150
RESPONDENTS: 105 (70.0 PERCENT)

QUESTIONS	FREQUENCIES I	II	III	IV	V	OMIT	AV.RESP.	ST.DEV.
1 DISCUSSES POINTS OF VIEW OTHER THAN HIS/HER OWN	9	19	33	19	8	17	3.0	1.1
2 CONTRASTS IMPLICATIONS OF VARIOUS THEORIES	8	29	31	10	2	17	2.7	1.0
3 DISCUSSES RECENT DEVELOPMENTS IN THE FIELD	8	27	31	13	13	13	3.0	1.2
4 GIVES REFERENCES FOR MORE INTERESTING AND INVOLVED POINTS	25	23	27	13	4	13	2.4	1.2
5 EMPHASIZES CONCEPTUAL UNDERSTANDING	12	27	34	15	5	12	2.7	1.1
6 EXPLAINS CLEARLY	31	42	22	4	1	5	2.0	0.9
7 IS WELL PREPARED	25	37	29	8	3	3	2.3	1.0
8 GIVES LECTURES THAT ARE EASY TO OUTLINE	20	29	26	15	8	7	2.6	1.2
9 SUMMARIZES MAJOR POINTS	6	33	35	18	8	5	2.9	1.0
10 STATES OBJECTIVES FOR EACH CLASS SESSION	4	22	24	29	19	7	3.4	1.2
11 IDENTIFIES WHAT HE/SHE CONSIDERS IMPORTANT	8	23	44	16	7	7	2.9	1.0
12 ENCOURAGES CLASS DISCUSSION	11	28	25	11	0	30	2.5	0.9
13 INVITES STUDENTS TO SHARE THEIR KNOWLEDGE + EXPERIENCES	22	16	13	2	2	50	2.0	1.1
14 INVITES CRITICISM OF HIS/HER OWN IDEAS	14	14	20	7	2	48	2.5	1.1
15 KNOWS IF THE CLASS IS UNDERSTANDING HIM/HER OR NOT	18	43	16	10	8	10	2.4	1.2
16 HAS STUDENTS APPLY CONCEPTS TO DEMONSTRATE UNDERSTANDING	11	12	21	11	6	44	2.8	1.2
17 KNOWS WHEN STUDENTS ARE BORED OR CONFUSED	19	30	27	12	7	10	2.6	1.2
18 HAS GENUINE INTEREST IN STUDENTS	6	16	24	28	16	15	3.4	1.2
19 GIVES PERSONAL HELP TO STUDENTS HAVING DIFFICULTIES	4	5	15	15	16	50	3.6	1.2
20 RELATES TO STUDENTS AS INDIVIDUALS	4	6	18	19	15	43	3.6	1.2
21 IS ACCESSIBLE TO STUDENTS OUT OF CLASS	2	3	19	25	22	34	3.9	1.0
22 HAS AN INTERESTING STYLE OF PRESENTATION	24	37	24	8	2	10	2.2	1.0
23 IS ENTHUSIASTIC ABOUT HIS/HER SUBJECT	13	26	28	17	11	10	2.9	1.2
24 VARIES THE SPEED AND TONE OF HIS/HER VOICE	7	25	27	23	14	9	3.1	1.2
25 HAS INTEREST IN AND CONCERN FOR THE QUALITY OF TEACHING	12	10	28	20	16	19	3.2	1.3
26 MOTIVATES STUDENTS TO DO THEIR BEST WORK	19	20	24	9	2	31	2.4	1.1
27 GIVES INTERESTING AND STIMULATING ASSIGNMENTS	10	14	22	6	0	53	2.5	0.9
28 GIVES EXAMS REQUIRING SYNTHESIS OF PARTS OF THE COURSE	4	12	29	32	10	18	3.4	1.0
29 GIVES EXAMS PERMITTING STUDENTS TO SHOW UNDERSTANDING	7	16	31	28	14	9	3.3	1.1
30 KEEPS STUDENTS INFORMED OF THEIR PROGRESS	10	5	19	21	4	46	3.1	1.2

	I	II	III	IV	V	VI	VII	OMIT	AV.RESP.	ST.DEV.
OVERALL TEACHING EFFECTIVENESS OF INSTRUCTOR	9	33	22	21	11	4	0	5	3.0	1.3
COURSE CONTENT RATING (COMPARED TO OTHERS AT UC)	1	5	12	21	28	26	7	5	4.8	1.3

	YES	NO	OMIT
ARE YOU TAKING THIS COURSE BECAUSE IT IS REQUIRED	83	20	2
	(79.0)	(19.0)	(1.9)

WINTER 1983 — INDIVIDUAL TEACHER DESCRIPTION PROFILE — ENROLLMENT: 16 — RESPONDENTS: 16 (100 PERCENT)

ITEMS	FREQUENCIES I	II	III	IV	V	OMIT	AV.RESP.	ST.DEV.
1 DISCUSSES POINTS OF VIEW OTHER THAN HIS/HER OWN	0	1	5	5	2	3	3.6	0.9
2 CONTRASTS IMPLICATIONS OF VARIOUS THEORIES	0	2	5	5	1	3	3.4	0.9
3 DISCUSSES RECENT DEVELOPMENTS IN THE FIELD	0	0	5	8	3	0	3.9	0.7
4 PRESENTS ORIGINS OF IDEAS AND CONCEPTS	1	1	4	7	0	3	3.3	1.0
5 GIVES REFERENCES FOR MORE INTERESTING POINTS	0	1	5	8	2	0	3.7	0.8
6 PRESENTS FACTS AND CONCEPTS FROM RELATED FIELDS	0	4	3	5	1	3	3.2	1.1
7 EMPHASIZES CONCEPTUAL UNDERSTANDING	0	1	6	7	1	1	3.5	0.8
8 EXPLAINS CLEARLY	0	4	8	3	1	0	3.1	0.9
9 IS WELL PREPARED	0	1	3	9	3	0	3.9	0.8
10 GIVES LECTURES THAT ARE EASY TO OUTLINE	1	3	5	4	3	0	3.3	1.2
11 IS CAREFUL AND PRECISE IN ANSWERING QUESTIONS	0	2	6	6	2	0	3.5	0.9
12 SUMMARIZES MAJOR POINTS	0	4	3	7	2	0	3.4	1.1
13 STATES OBJECTIVES FOR EACH CLASS SESSION	2	0	0	4	10	0	4.3	1.4
14 IDENTIFIES WHAT S/HE CONSIDERS IMPORTANT	1	3	3	4	5	0	3.6	1.4
15 ENCOURAGES CLASS DISCUSSION	0	0	1	3	12	0	4.7	0.6
16 INVITES STUDENTS TO SHARE THEIR KNOW. & EXPERIENCE	0	0	0	3	13	0	4.8	0.4
17 CLARIFIES THINKING BY IDENT. REASONS FOR QUESTIONS	0	3	3	5	2	3	3.5	1.1
18 INVITES CRITICISM OF HIS/HER OWN IDEAS	0	3	4	4	3	2	3.5	1.1
19 KNOWS IF CLASS IS UNDERSTANDING HIM/HER OR NOT	2	3	7	3	1	0	2.9	1.1
20 HAS INTEREST IN AND CONCERN FOR QUALITY OF TEACHING	0	0	3	6	6	1	4.2	0.8
21 HAS STUDENTS APPLY CONCEPTS TO DEMON. UNDERSTANDING	1	1	2	6	5	1	3.9	1.2
22 HAS GENUINE INTEREST IN STUDENTS	0	1	3	5	5	2	4.0	1.0
23 IS FRIENDLY TOWARDS STUDENTS	0	0	3	5	8	0	4.3	0.8
24 RELATES TO STUDENTS AS INDIVIDUALS	0	0	3	3	8	2	4.4	0.9
25 RECOGNIZES AND GREETS STUDENTS OUT OF CLASS	0	0	0	4	9	3	4.7	0.5
26 IS ACCESSIBLE TO STUDENTS OUTSIDE OF CLASS	0	1	0	7	7	1	4.3	0.8
27 IS VALUED FOR ADVICE NOT DIRECTLY RELATED TO COURSE	2	0	4	1	2	5	3.1	1.4
28 RESPECTS STUDENTS AS PERSONS	0	0	2	1	9	4	4.6	0.8
29 IS A DYNAMIC AND ENERGETIC PERSON	1	2	5	4	3	1	3.4	1.2
30 HAS AN INTERESTING STYLE OF PRESENTATION	1	6	7	1	1	0	2.7	1.0
31 SEEMS TO ENJOY TEACHING	0	1	5	7	3	0	3.8	0.9
32 IS ENTHUSIASTIC ABOUT HIS SUBJECT	0	0	4	7	5	0	4.1	0.8
33 SEEMS TO HAVE SELF-CONFIDENCE	1	1	4	7	3	0	3.6	1.1
34 VARIES THE SPEED AND TONE OF HIS/HER VOICE	1	2	5	7	1	0	3.3	1.0
35 HAS A SENSE OF HUMOR	0	0	6	7	3	0	3.8	0.8

SCALE		AV. SCALE SCORE
1 ANALYTIC/SYNTHETIC APPROACH	(ITEMS 1- 7)	3.5
2 ORGANIZATION/CLARITY	(ITEMS 8-14)	3.6
3 INSTRUCTOR-GROUP INTERACTION	(ITEMS 15-21)	3.9
4 INSTRUCTOR-INDIV. STUDENT INTERACTION	(ITEMS 22-28)	4.2
5 DYNAMISM/ENTHUSIASM	(ITEMS 29-35)	3.5

	I	II	III	IV	V	VI	VII	OMIT	AV.RESP.	ST.DEV.
OVERALL RATING OF INSTRUCTOR	0	1	3	4	5	2	1	0	4.4	1.4
COURSE CONTENT RATING (COMPARED TO OTHERS AT UC)	0	2	1	6	1	5	1	0	4.6	1.6

	I	II	III	IV	V	OMIT	AV.RESP.	ST.DEV.
1 ASSIGNMENTS HAD SIGNIFICANT EDUCATIONAL VALUE	0	1	2	6	6	1	4.1	0.9
2 EXAMS ADEQUATELY SAMPLED THE IMPORTANT MATERIAL	0	1	0	0	0	15	2.0	0.0
3 EXAMS BASED ON ASSIGNMENTS MORE THAN LECTURES	0	0	0	0	0	16	0.0	0.0
4 WORKLOAD HEAVIER THAN COURSES OF COMPARABLE CREDIT	0	6	7	0	0	3	2.5	0.5
5 THUS FAR, GRADING HAS BEEN TOO STRICT	1	0	0	0	0	15	1.0	0.0

SPRING 1983 INDIVIDUAL TEACHER DESCRIPTION PROFILE

ENROLLMENT: 20
RESPONDENTS: 5 (25.0 PERCENT)

QUESTIONS	FREQUENCIES I	II	III	IV	V	OMIT	AV.RESP.	ST.DEV.
1 DISCUSSES POINTS OF VIEW OTHER THAN HIS/HER OWN	0	0	1	2	2	0	4.2	0.9
2 CONTRASTS IMPLICATIONS OF VARIOUS THEORIES	0	1	2	2	0	0	3.2	0.9
3 DISCUSSES RECENT DEVELOPMENTS IN THE FIELD	0	0	2	0	3	0	4.2	1.2
4 GIVES REFERENCES FOR MORE INTERESTING AND INVOLVED POINTS	0	0	1	2	1	1	4.0	0.9
5 EMPHASIZES CONCEPTUAL UNDERSTANDING	0	0	0	2	3	0	4.6	0.6
6 EXPLAINS CLEARLY	0	0	1	2	2	0	4.2	0.9
7 IS WELL PREPARED	0	0	0	3	2	0	4.4	0.6
8 GIVES LECTURES THAT ARE EASY TO OUTLINE	0	0	1	3	1	0	4.0	0.8
9 SUMMARIZES MAJOR POINTS	0	0	0	1	4	0	4.8	0.5
10 STATES OBJECTIVES FOR EACH CLASS SESSION	0	0	0	2	3	0	4.6	0.6
11 IDENTIFIES WHAT HE/SHE CONSIDERS IMPORTANT	0	0	0	2	3	0	4.6	0.6
12 ENCOURAGES CLASS DISCUSSION	0	0	0	1	4	0	4.8	0.5
13 INVITES STUDENTS TO SHARE THEIR KNOWLEDGE + EXPERIENCES	0	0	0	1	4	0	4.8	0.5
14 INVITES CRITICISM OF HIS/HER OWN IDEAS	0	0	0	3	2	0	4.4	0.6
15 KNOWS IF THE CLASS IS UNDERSTANDING HIM/HER OR NOT	0	0	1	2	2	0	4.2	0.9
16 HAS STUDENTS APPLY CONCEPTS TO DEMONSTRATE UNDERSTANDING	0	0	1	2	1	1	4.0	0.9
17 KNOWS WHEN STUDENTS ARE BORED	0	0	1	2	2	0	4.2	0.9
18 HAS GENUINE INTEREST IN STUDENTS	0	0	1	2	2	0	4.2	0.9
19 GIVES PERSONAL HELP TO STUDENTS HAVING DIFFICULTIES	0	0	0	2	3	0	4.6	0.6
20 RELATES TO STUDENTS AS INDIVIDUALS	0	0	1	0	4	0	4.6	1.0
21 IS ACCESSIBLE TO STUDENTS OUT OF CLASS	0	0	0	1	3	1	4.8	0.6
22 HAS AN INTERESTING STYLE OF PRESENTATION	0	0	0	2	3	0	4.6	0.6
23 IS ENTHUSIASTIC ABOUT HIS/HER SUBJECT	0	0	0	0	5	0	5.0	0.0
24 VARIES THE SPEED AND TONE OF HIS/HER VOICE	0	0	0	1	4	0	4.8	0.5
25 HAS INTEREST IN AND CONCERN FOR THE QUALITY OF TEACHING	0	0	0	1	4	0	4.8	0.5
26 MOTIVATES STUDENTS TO DO THEIR BEST WORK	0	0	0	1	3	1	4.8	0.6
27 GIVES INTERESTING AND STIMULATING ASSIGNMENTS	0	0	0	3	2	0	4.4	0.6
28 GIVES EXAMS REQUIRING SYNTHESIS OF PARTS OF THE COURSE	1	0	0	0	1	3	3.0	4.0
29 GIVES EXAMS PERMITTING STUDENTS TO SHOW UNDERSTANDING	1	0	1	0	0	3	2.0	2.0
30 KEEPS STUDENTS INFORMED OF THEIR PROGRESS	0	1	0	3	1	0	3.8	1.2

	I	II	III	IV	V	VI	VII	OMIT	AV.RESP.	ST.DEV.
OVERALL TEACHING EFFECTIVENESS OF INSTRUCTOR	0	0	0	1	0	2	2	0	4.0	1.4
COURSE CONTENT RATING (COMPARED TO OTHERS AT UC)	0	0	1	1	0	1	2	0	5.4	2.0

	YES	NO	OMIT
ARE YOU TAKING THIS COURSE BECAUSE IT IS REQUIRED	0	5	0
	(0.0)	(100.0)	(0.0)

SPRING 1983

Appendix G

Cover Letter Accompanying Returned Materials

Berkeley: TEACHING INNOVATION & EVALUATION SERVICES
TIES

TO:

FROM:

RE: TEACHING EVALUATION CONSULTATION SERVICE

Enclosed are the computer summarized results of the student evaluation forms collected in your class last term. The original questionnaires, on which the summary is based, are also enclosed.

In the next week or two, I will call to schedule an appointment to discuss the findings from the evaluation and to make suggestions that might be useful in improving the next presentation of the course. If you have any questions, please call me at the TIES office (2-6392).

In interpreting the results from your class, we suggest that you:

1. Note those items which have a large "omit" rate. Students marked these items "Doesn't apply or don't know", or left the item blank. These items may well be inappropriate for describing your course. If so, ignore them.

2. Note the 4 to 5 items which have the highest average responses and the 4 to 5 items which have the lowest average responses and consider each of these items in light of your course objectives, philosophy of teaching, etc.

   It is important to remember that even though these items and scales were developed out of research on effective university teaching, a "low" or "high" score on any given item cannot be interpreted as indicative of "good" or "bad" teaching per se; the meaning of any item or scale score can only be interpreted in light of such factors as your own objectives for the course, the level of the course, the nature of the content, etc.

3. Note the response frequencies for each item (number of students who said an item was "not at all descriptive" or "very descriptive" of you in this course. By noting the range of student responses to an item, you will be able to identify those items on which there is the greatest and the least consensus among students. Your conclusions regarding the meaning of an item rating may differ depending on the degree of student consensus.

4. Read the open-ended responses made by your students on the back page of the questionnaires themselves to see to what extent these comments corroborate, contradict, or elaborate the conclusions you have drawn from analyzing the summarized data. These open-ended items are also an important source of information not covered by the structured questions and can be very useful in making changes in the course in the future.

Appendix H

Change Comparison Sheet

TECS COMPARISON DATA

Teaching Innovations and
Evaluation Services (TIES)
262 Stephens
642-6392

Name: _____

Department: _____

Time 1 Date / Enrollment / % Response

_____

Time 2 Date / Enrollment / % Response

_____

* Summary: ____/30 items went up 0.5 or more

____/30 items went down 0.5 or more

____/30 items were tied or varied ± 0.2 or less

____items at 4.5 or above, Time 1

____items at 4.5 or above, Time 2

____items at 3.5 or below, Time 1

____items at 3.5 or below, Time 2

Item	Time 1	Time 2	Change	Item	Time 1	Time 2	Change
1.				17.			
2.				18.			
3.				19.			
4.				20.			
5.				21.			
6.				22.			
7.				23.			
8.				24.			
9.				25.			
10.				26.			
11.				27.			
12.				28.			
13.				29.			
14.				30.			
15.				Overall Inst.			
16.				Overall Course			

Items which you indicated you worked on:

* To date we do not have enough experience with this project to determine what constitutes a significant difference for these data. There are a number of factors involved, e.g., class size, the amount of student consensus on each item, how high the initial ratings for each item were, and the relative difficulty of increasing one's ratings on each of the 30 items. We feel reasonably certain, however, that differences of 0.2 or less should be considered "no change" and that differences of 0.5 are probably significant.

TEACHING INNOVATION AND EVALUATION SERVICES
262 Stephens Hall

COMPARISON OF STUDENT RATINGS OVER TIME

Name_____ Course_____

	Time 1	Time 2	Time 3
Date:			
Enrollment:			
Percent Response:			

Mean Ratings on a 5-point scale
(Where 1= Not at all Descriptive and 5= Very Descriptive)

	Time 1	Time 2	Time 3
1. Discusses points of view other than his/her own.....			
2. Contrasts implications of various theories.....			
3. Discusses recent developments in the field.....			
4. Gives references for more interesting & involved points.....			
5. Emphasizes conceptual understanding.....			
6. Explains clearly.....			
7. Is well prepared.....			
8. Gives lectures that are easy to outline.....			
9. Summarizes major points.....			
10. States objectives for each class session.....			
11. Identifies what he/she considers important.....			
12. Encourages class discussion.....			
13. Invites students to share their knowledge and experiences.....			
14. Invites criticism of his/her own ideas.....			
15. Knows if the class is understanding him/her or not...			
16. Has students apply concepts to demonstrate understanding.....			
17. Knows when students are bored or confused.....			
18. Has genuine interest in students.....			
19. Gives personal help to students having difficulties in course.....			
20. Relates to students as individuals.....			
21. Is accessible to students out of class.....			
22. Has an interesting style of presentation.....			
23. Is enthusiastic about his/her subject.....			
24. Varies the speed and tone of his/her voice.....			
25. Has interest in and concern for the quality of his/her teaching.....			
26. Motivates students to do their best work.....			
27. Gives interesting and stimulating assignments.....			
28. Gives examinations requiring synthesis of parts of the course.....			
29. Gives examinations permitting students to show understanding.....			
30. Keeps students informed of their progress.....			

Mean Ratings on a 7-point Scale
(Where 1=Not at all Effective/Worthwhile and 7=Extremely Effective/Worthwhile)

	Time 1	Time 2	Time 3
1. Considering both the limitations and possibilities of the subject matter & course, how would you rate the overall teaching effectiveness of this instructor?			
2. Focusing now on course content, how worthwhile was this course in comparison with others you have taken at this university?			

* To date we do not have sufficient experience to determine what constitutes a significant difference. A number of factors are involved, e.g., class size, the amount of student consensus on each item, how high the initial ratings for each item were, and the relative difficulty of increasing one's ratings. We feel reasonably certain, however, that differences of 0.2 or less should be considered "no change" and that differences of 0.5 are probably significant.

Appendix I: Sample Ideas

This appendix includes a sample of 26 ideas for item 15: Knows if the class is understanding him/her or not. The purpose of this appendix is to give the reader a sense of the type and range of ideas used in our consultations.

Know if the Class is Understanding You Or Not

Getting and Using Feedback

Number 84: Increase your eye contact with students.

Number 85: Ask students if they understand what you are saying.

Number 86: Call on students to paraphrase what you have said or to summarize major points.

Number 87: Begin your lecture with a series of questions.

Number 88: Ask questions of the class during lecture.

Number 89: Give students problems to solve during class time.

Number 90: Reserve the last 10 minutes of class for questions.

Number 91: Give frequent assignments.

Number 92: Give frequent quizzes.

Number 93: Schedule an oral quiz with each student.

Number 94: Schedule individual appointments with students.

Number 95: Assign minute papers at the end of a class session.

Number 96: Use index cards to get feedback.

Number 97: Ask students to give definitions, associations or applications of concepts or ideas.

Number 98: Use a question box to solicit students' questions, comments or problems.

Number 99: Periodically borrow students' lecture notes.

Number 100: Encourage students to form study groups and send representatives to see you about difficulties the groups might be having.

Number 101: Establish a Liaison Committee.

Number 102: Install a telephone "hotline".

Number 103: Attend or lead lab or discussion sections yourself.

Number 104: Have students turn in their lecture notes as a course assignment.

Evaluating Instruction

Number 105: Hand out short questionnaires to get feedback.

Number 106: Have students send you a telegram evaluation.

Number 107: Invite a member of TIES to conduct an oral evaluation with your students.

Number 108: Videotape your class.

Number 109: Respond to student suggestions and criticisms with a visible sign.

File name: 84

IF YOU WANT TO:

- Know if the class is understanding you or not
- Know if the students are bored or confused
- Have a more interesting style of presentation

YOU MAY WISH TO CONSIDER:

Increasing the amount of eye-contact you have with the students during your lectures.

"I look carefully at students' faces," says one history professor. "You can't teach a bored or confused class so if I see a glazed look which suggests that students are not following me, I interrupt my lecture and say, 'We may be going too fast...,' or 'This point doesn't seem to be clear to some of you...'.

Some faculty members prefer to direct their questions to the entire class; others find it effective to call on students by name, interrupting their lectures to say, "Jerry, you look like you had a question," or "Several of you looked puzzled. Sally, can you tell me what doesn't seem to be clear?"

One psychology professor says that he was once assigned a room so poorly lit that he could not see the students from the platform until he moved down to the floor level. In teaching in a new room, note any physical obstacles that may interfere with your eye-contact with students and make whatever changes are possible.

A professor of English says that because he is very nearsighted, he has learned to listen carefully and pick up on auditory cues which may indicate that the students are bored or confused. "I find that the rustling of papers or the scraping and squeaking of chairs are excellent indicators that students are having difficulty," he says.

Limitations on Use of Suggestion

Discipline: None
Course Level: None
Course Size: None
Mode: Primarily lecture

File name: 85

IF YOU WANT TO:

- Know if the class is understanding you or not
- Know if the students are bored or confused
- Clear up any confusion students may be having
- Identify what is most important or most difficult for students

YOU MAY WISH TO CONSIDER:

Asking students directly whether they understand what you are saying.

Many excellent teachers punctuate their lectures with such questions as, "Is this explanation sufficient?" or "Do you agree?" or, "Was that clear?"

However, as one art history teacher reports, "Sometimes the students look confused, but won't ask questions. This tends to happen especially toward the beginning of the course. When it does happen, I say something like, 'Perhaps you don't have any questions just yet, but I have a feeling I passed over X-topic very quickly. Let me say a few more words about that, because students often find it difficult to understand the first time around. In this way I let the students know that it's OK to be confused. It's OK to ask questions in my class. By the second or third week, they usually feel comfortable enough to say that something is still not clear to them."

Limitations on Use of Suggestion

Discipline: None
Course Level: None
Course Size: None
Mode: Primarily lecture

File name: 86

IF YOU WANT TO:

- Know if the class is understanding you or not
- Know if students are bored or confused
- Summarize major points before moving on to another topic
- Emphasize conceptual understanding
- Teach students to be active listeners

YOU MAY WISH TO CONSIDER:

Calling on students to paraphrase or summarize what you have just said.

"Asking students if they understand gets you only so far," one history teacher explains. "Asking Ms. Jones to summarize the main things to remember about X, and then asking other students to help out if she is having difficulty is a far better check on students' understanding."

Asking questions of specific students has other benefits too. For example, because students know that they may be called upon, they listen more attentively for the main ideas and that in turn helps them to organize their notes better. Getting students to summarize periodically also breaks the monotony of a 50-minute lecture.

Limitations on Use of Suggestion

Discipline: None
Course Level: None
Course Size: None
Mode: None

File name: 87

IF YOU WANT TO:

- Know if the class is understanding you or not
- Give students the opportunity to ask questions

AY WISH TO CONSIDER:

Beginning your lecture with a series of questions.

A zoology professor does this at the beginning of the week. He opens class with a question like, "What is bothering you about the material we have discussed so far?" or "Is there anything from last week that you would like to go over again?"

He then takes a series of questions, making notes on the board without responding. Sometimes he pulls the questions together and gives a mini lecture or review (like a composer taking a few notes from the audience and then composing a concerto). Other times he addresses each question sequentially.

Limitations on Use of Suggestion

Discipline: None
Course Level: None
Course Size: None
Mode: None

File name: 88

IF YOU WANT TO:

- Know if the class is understanding you or not
- Have students apply concepts to demonstrate understanding
- Introducing variety into your lecture

YOU MAY WISH TO CONSIDER:

Asking questions of the class during lecture.

Several professors routinely intersperse questions into their lectures. As he prepares his lecture notes, for example, an engineering professor identifies key places where he can stop and ask the class a leading question. In describing a particular process, he might pause to ask, "Now who can tell me what happens next?" and then call on a specific student or wait until someone responds.

"It's important to ask questions of students as you are lecturing," he explains. "First, it makes students active learners so that they must think about the material, rather than just passively absorb it. Second, it helps me to know if they are understanding what I am saying."

As a variation on this technique, he poses a problem and has students try to answer it in writing. He circulates while they are working, observing their problem solving approaches and identifying their difficulties. After two or three minutes, he calls for solutions and leads a discussion on how students approached the problem.

Limitations on Use of Suggestion

Discipline: None
Course Level: None
Course Size: None
Mode: None

File name: 89

IF YOU WANT TO:

- Know if the class is understanding you or not
- Know if the students are bored or confused
- Have students apply concepts to demonstrate understanding
- Give help to students who are having difficulty

YOU MAY WISH TO CONSIDER:

Giving students problems to solve during class time so that you can observe any difficulties they are having.

One physical science teacher who uses this technique begins by outlining and discussing a major concept. He then gives students a specific short problem and asks them to take 10 minutes to try to apply the new concept.

"While the students are working, I walk up and down the aisles observing. At the end of 10 minutes or so I summarize some of the common errors they made, why I think they made them, and then give them tips on some of the most fruitful strategies for solving that kind of problem."

Having the students try an immediate application of a new concept greatly reinforces their learning, he believes. "By observing how they tackle a problem, I become much more aware of any difficulties they have understanding the concept and can correct those misunderstandings on the spot."

A variation on this technique is used by a dramatic art teacher in studio courses. "Whenever I notice something especially good or bad in a student's work," he says, "I call the other students over and use that as an opportunity to share the information with the group."

Limitations on Use of Suggestion

Discipline: None
Course Level: None
Course Size: None
Mode: None

File name: 90

IF YOU WANT TO:

- Know if the class is understanding you or not
- Give students an opportunity to ask questions or make comments

YOU MAY WISH TO CONSIDER:

Reserving the last 10 minutes of class for questions.

A faculty member in the humanities wanted to provide opportunity for student questions during his lectures, but he was concerned that the questions might monopolize class time and take them off the topic. "I decided to reserve the last ten minutes of class for student questions," he says. "I feel better knowing I will have the time to present the material, and students feel better knowing they have an opportunity to clarify points they may not have understood."

Limitations on Use of Suggestion

Discipline: None
Course Level: None
Course Size: None
Mode: Lecture

File name: 91

IF YOU WANT TO:

- Know if the class is understanding you or not
- Know if students are bored or confused
- Have students apply concepts to demonstrate understanding
- Identify problems individual students may be having

YOU MAY WISH TO CONSIDER:

Giving frequent (weekly or biweekly) assignments.

Most excellent teachers give students frequent assignments which allow them to apply course concepts and improve communication and problem-solving skills. Even in very large classes, these instructors make a point of reading and commenting on at least a sample of the papers or problem sets.

"If you assign papers," one humanities teacher says, "it's critical that you as well as the TAs or Readers read them. Otherwise, you don't get the feedback." A faculty member in a professional school says that he always assigns three papers in undergraduate courses and four in graduate courses. "I want them to learn to write," he says, "and because the papers are always tied to the reading assignments, they allow me to see how well students really understand the material."

One faculty member requires students to write very short (one or two paragraph) abstracts or summaries of each reading assignment and to turn them in each week. "Although some students consider this very 'high school', most find it useful for keeping up with the reading. The students also find these summaries useful for review and they help me know how well the students understand the material."

Limitations on Use of Suggestion

Discipline: None
Course Level: None
Course Size: None
Mode: None

Suggestion Number: 92

IF YOU WANT TO:

- Know if the class is understanding you or not
- Know if the students are bored or confused
- Identify and help students who are having difficulty
- Know the kinds of difficulties students are having

YOU MAY WISH TO CONSIDER:

Giving frequent quizzes.

One excellent science teacher gives students practice quizzes (of 10 to 15 minutes duration) throughout the quarter. "I don't grade the quizzes," he explains, "but I do read them and review any material with which a large number of students seemed to have difficulty. I also seek out any students who seem to be having real problems understanding the material and spend more time with them in my office or in the departmental course center."

Limitations on Use of Suggestion

Discipline: None
Course Level: Undergraduate
Course Size: None
Mode: None

File name: 93

IF YOU WANT TO:

- Know if the class is understanding you or not
- Know if students are bored or confused
- Identify problems individual students may be having
- Get to know your students better

YOU MAY WISH TO CONSIDER:

Scheduling an oral quiz with each student in your office.

One teacher of engineering reports giving oral quizzes in which a student is given a series of problems to solve on the blackboard in his office. He has found this technique invaluable in understanding how students tackle problems.

"If you look only at students' homework," he says, "you'll know whether they got a problem right or wrong, but it won't tell you why. Observing students as they apply concepts and solve problems gives you much more useful information about where your explanations or those of the textbook skip a step or are unclear."

Limitations on Use of Suggestion

Discipline: Sciences and professional
Course Level: None
Course Size: Probably not above 30
Mode: None

File name: 94

IF YOU WANT TO:

- Know if the class is understanding you or not
- Know if students are bored or confused
- Get to know your students
- Give help tdents who are having difficulty
- Encourage students to come see you during office hours

YOU MAY WISH TO CONSIDER:

Scheduling an individual appointment with each student.

A statistics professor felt that he was not being successful in generating class discussion. At the end of the third week, still unable to encourage class participation, he decided to pass around a sheet of paper with a list of 10-minute blocks of time when he would be available for individual appointments.

Each student was required to sign up for one of the 10 minute appointments. They were told that the chief purpose was for him to get to know the students better and to listen to any complaints or suggestions they might have.

"I found that this was a real ice-breaker," he explains. "Even though most of our discussions were mainly chit-chat, some students used the opportunity to indicate problems they were having in the course or to make suggestions about course improvements. Perhaps the chief benefit was that it gave me an opportunity to get to know the students. As a result, they seemed to feel more comfortable asking and answering questions in class.

"In addition, several students who were having problems understanding the material began to seek me out after class. I'm not certain they would have done so if I hadn't made this effort to get to know them individually."

Limitations on Use of Suggestion

Discipline: None
Course Level: None
Course Size: Up to 50-70
Mode: Lecture/discussion

File name: 95

IF YOU WANT TO:

- Know if the class is understanding you or not
- Know if students are bored or confused
- Encourage students to listen actively during lectures
- Give students experience writing short essay answers

YOU MAY WISH TO CONSIDER:

Assigning "minute papers" at the end of some lectures.

"Minute papers," as used by a professor of physics, consist of two questions to which students give written responses at the end of each weekly lecture. "I call them 'minute papers,'" he says, "because I preface them with the request that they take a minute or two to write on these two questions:

(1) What is the most significant thing you learned today? and

(2) What question is uppermost in your mind at the end of today's session?

"The minute papers started out purely as an attendance device," he explains. "As I began to read their responses, however, I found them very useful in evaluating how successful I had been in conveying the material that day. In fact, now I often quote one or two of their essay responses at the beginning of the next discussion period to get the discussion started."

As is the case with many educational experiments, this one had an additional, unintended benefit. "Because these are mainly science students who are seldom asked write, I pointed out that these minute papers were good practice for the essay questions which would constitute my final. As the term progressed, I noticed an improvement in the papers: they became longer, better developed, and more carefully phrased."

Limitations on Use of Suggestion

Discipline: None
Course Level: None
Course Size: None
Mode: None

File name: 96

IF YOU WANT TO:

- Know if the class is understanding you or not
- Know if students are bored or confused
- Give students opportunities to suggest improvements in the course

YOU MAY WISH TO CONSIDER:

Distributing index cards several times during the semester and asking students to give you feedback on the course.

A professor of education asks students to respond to two questions, one on the front and one on the back of the index cards. The two questions he uses are, "How's it going?" and, "Any suggestions?"

Of course, if you have reason to think that there is a problem with a specific aspect of the course, you will get better information if you target your questions accordingly. For example, "Any problems with the text?" or "Students have complained in the past that I lecture too fast. I've been trying to improve. Is my lecture pace a problem for you?"

Limitations on Use of Suggestion

Discipline: None
Course Level: None
Course Size: None
Mode: None

File name: 97

IF YOU WANT TO:

- Know if the class is understanding you or not
- Know if the students are bored or confused

YOU MAY WISH TO CONSIDER:

Asking students to give definitions, associations, and applications for difficult concepts or ideas.

Instead of waiting until the midterm or final to find out how many students understand the material, try handing out a short questionnaire or quiz on the basic concepts covered that day and give the students time (10 to 20 minutes) to complete them at the end of the hour.

An example of a questionnaire or quiz covering concepts for the week might read:

A. Concept Definition. As I understand it, the main idea (concept, point, etc.) of today's lecture (or discussion) was:

B. Concept Applications. A good example of an application of this idea (concept, point, etc.) is:

C. Concept Associations. In my mind the main point of today's lecture is most closely related to the following concepts, ideas, people, places, processes, events, or things. (Have students list several items).

This suggestion was taken and adopted from Otis Ewing Lancaster, Effective Teaching and Learning, N.Y.: Gordon and Breach, 1974 pp. 70-71. One variation on this is to give the questions as take-home quizzes in which case you may want to insist that the students choose different words (in giving definitions) and examples from those presented in lectures or assigned readings. Another variation is to call on particular students to answer each question orally at the end of the hour.

Limitations on Use of Suggestion

Discipline: None
Course Level: None
Course Size: None
Mode: None

File name: 98

IF YOU WANT TO:

- Know if the class is understanding you or not
- Know if students are bored or confused

YOU MAY WISH TO CONSIDER:

Using a question box to solicit students' questions, comments or problems.

A psychology teacher places a box in the back of the room for student questions, comments or problems. Students can drop questions anonymously into the box at the beginning of the class or during the break. After the end of the period, the teacher collects the box and reviews the questions.

This technique gives students an anonymous means for making their troublesome areas or questions known to the instructor. It can also help a faculty member identify major areas of difficulty wherever the same problems are raised by several students.

Limitations on Use of Suggestion

Discipline: None
Course Level: None
Course Size: None
Mode: None

File name: 99

IF YOU WANT TO:

- Know if the class is understanding you or not
- Know if the students are bored or confused

YOU MAY WISH TO CONSIDER:

Periodically borrowing lecture notes from several students in your class.

The best way to select students' notes is at random. Faculty members who have used this technique warn that it can be a very chastening as well as useful experience. "There was an incredible difference between what I thought I had said and the points I thought I had stressed, and what the students heard or felt was important to write down," one faculty member reported.

This exercise can be especially useful if previous student evaluations have indicated: (1) your lectures are not as well organized as they might be; (2) students find it difficult to identify what is most important; or (3) your lectures are so tightly packed and delivered so rapidly that it is difficult for students to take good notes.

A variation on this suggestion is to audiotape the lecture as well. This allows you to do a three-way comparison between what you thought you said (or intended to say), what you can hear yourself actually saying (including the way in which you said it), and what a random sample of students thought you said (or thought was important enough to write down).

Limitations on Use of Suggestion

Discipline: None
Course Level: None
Course Size: None
Mode: None

Suggestion Number: 100

IF YOU WANT TO:

- Know if the class is understanding you or not
- Know if the students are bored or ced
- Help students get to know one another

YOU MAY WISH TO CONSIDER:

Encouraging students to form small study groups and to send representatives to see you about any difficulties their groups are having.

One humanities teacher who does this says, "Although I encourage the students to come see me about any problems they are having with the course, freshmen are often loathe to do that. By encouraging them to form study groups, I am trying to help them get to know at least some of their fellow students and to take advantage of what they can learn from one another.

"Also, it seems to be easier for some students to come to me for assistance if they 'represent' a group, because the problems are then seen as common to many students not just the group's representative. Faculty members can be very intimidating for some freshmen, even those of us who try very hard not to be. Also, many of these students were at the top of their high school classes and it is difficult for them to adjust to the competition at Berkeley. While it is difficult for them to admit that they don't understand something, there is a certain comfort in knowing that some of their fellow students are in the same boat and that by joining forces they can help one another."

Limitations on Use of Suggestion

Discipline: None
Course Level: None
Course Size: Over 15 to 20
Mode: Lecture

File name: 101

IF YOU WANT TO:

- Know if the class is understanding you or not
- Know if the students are bored or confused
- Get to know at least some of your students
- Identify any problems students may be having in the course

YOU MAY WISH TO CONSIDER:

Establishing a Liaison Committee of three to five students to meet with you once a week to discuss student difficulties or dissatisfactions.

In a very large class, the students should be selected on a "district" basis so that all students have relatively easy physical access to one of the members of the Liaison Committee. You can rotate membership on the committee from a list of volunteers, but be sure the entire class knows who the Liaison students are at any given time and how and why they should use them. Be sure, too, that the Liaison students understand their function and encourage them to circulate and seek out information from the other students.

This technique was initiated as a research project at the University of Minnesota and has been used successfully by 50 teachers at the University of Texas. Evaluations of its usefulness for both students and instructors indicate that most students felt that actual improvements had been made in the course as a result of the committee's interaction with the instructor, and students especially appreciated the opportunity to get to know one of their instructors better.

Benefits cited by faculty included increased faculty awareness of student learning needs and increased student awareness of the instructor's teaching problems and educational philosophy.

Limitations on Use of Suggestion

Discipline: None
Course Level: None
Course Size: None
Mode: None

File name: 102

IF YOU WANT TO:

- Know if the class is understanding you or not
- Know if the students are bored or confused
- Receive on-going feedback from students

YOU MAY WISH TO CONSIDER:

Installing a telephone "hotline".

A telephone "hotline" allows students to report course-related difficulties at the time they are having them, e.g., at 10:00 PM when trying to solve a problem or understand a difficult section in the text. One economics professor received a mini-grant from the Academic Senate Committee on Teaching to install a telephone answering service in the TA's room and has used it for several years in a large introductory course.

"Students are reminded of the availability of the 'hotline' throughout the course," he explains. "Although they can call me or the TAs directly during regular hours, this allows them to report difficulties at odd hours or to register anonymous gripes on the tape. Each morning one of the TAs listens to the tape and refers the problems that should be taken up in lecture to me and those which should be taken up in the discussion sections to the other TAs."

"Perhaps the most useful aspect of the telephone hotline is as a safety valve," the instructor explains. "There is no way a course of 800 is going to be anything but impersonal. I try to acknowledge that and give students as many chances as possible to be heard."

Limitations on Use of Suggestion

Discipline: None
Course Level: None
Course Size: Above 150
Mode: Lecture

File name: 103

IF YOU WANT TO:

- Know if the class is understanding you or not
- Know if the students are bored or confused
- Give help to students who are having problems
- Get to know at least some of your students

YOU MAY WISH TO CONSIDER:

Attending or leading lab or discussion sections yourself.

Several faculty report that they always lead one lab or discussion group themselves so that they have firsthand knowledge of how the course is going.

"Students vary considerably in their command of prerequisite subject matter in this course," one faculty member explains. "It's a tough course and the chief task is to find out as soon as possible who is going to have trouble and to give them help early on. I can't find that out sitting in my office; I can't always depend on the TAs to let me know. Also the atmosphere in the biological sciences is so fiercely competitive, many of the students try to hide their weaknesses until it is too late for me to help them."

Another faculty member in the sciences agrees. "I find there is no substitute for knowing firsthand how students are doing, what parts of the course they are grasping well, what parts need more explanation or more opportunities for practice."

Many excellent teachers also attend the lab or discussion groups led by their TAs to observe or to participate. In labs, they circulate through the lab, observing, asking questions, or lending a hand to students who may be having special difficulties. In this way, they also hope to provide the TAs with good role models.

Limitations on Use of Suggestion

Discipline: None
Course Level: None
Course Size: None
Mode: Laboratory or discussion sections

File name: 104

IF YOU WANT TO:

- Know if the class is understanding you or not
- Give help to students who are having difficulty
- Motivate students to do their best work

YOU MAY WISH TO CONSIDER:

Having students turn in their lecture notes as a course assignment.

One faculty member in engineering requires that students hand in their lecture notes, course assignments, homework, quizzes, etc., two or three times a term, typically before the midterms or final exam. Students must prepare a detailed table of contents to accompany their notes.

"I find this is a good way to get a sense of how well students are understanding the material," explains the professor. "If someone is having difficulties I can spot them and give them some help."

"As an added bonus, students are able to leave this introductory course with a good set of detailed notes, and a useful table of contents, which will make it easier for them to locate this material when they need it in their later course work."

Limitations on Use of Suggestion

Discipline: None
Course Level: None
Course Size: None
Mode: None

File name: 105

IF YOU WANT TO:

- Know if the class is understanding you or not
- Know if students are bored or confused
- Clarify reasons for students' confusion or boredom
- Get specific feedback and suggestions during the term

YOU MAY WISH TO CONSIDER:

Periodically handing out short questionnaires on specific aspects of the course.

This is a form of what professional evaluators call "formative evaluation" (as differentiated from a "summative" or end-of-course evaluation). It is designed solely to give you very specific, concrete information on where you can make improvements in course content or organization, assignments, or aspects of your own teaching effectiveness during the same term rather than next time you teach the course.

Formative evaluation can be especially helpful if you are teaching a new or substantially revised course, adopting a new text or lab-manual, or experimenting with a new mode of instruction. Many faculty members routinely administer specially tailored mid-quarter evaluations. Generally, they report that these evaluations dramatically improve their communication and rapport with students, even if there are few basic changes that they are able to make in the course that term.

Note: See also suggestion No. 109 on how to acknowledge mid-term feedback from students.

Limitations on Use of Suggestion

Discipline: None
Course Level: None
Course Size: None
Mode: None

File name: 106

IF YOU WANT TO:

- Know if the class is understanding you or not
- Know if the students are bored or confused

YOU MAY WISH TO CONSIDER:

Having students send you a telegram evaluation.

A professor of public health says, "Midway through the course, I ask the students to write a telegram--strictly limited to 20 words or less--describing the most pressing problem they are having in the course. I tell them that they can address their telegram to me directly, to future students in the class, to the department chairperson, or to a friend or parent.

She finds the technique particularly effective if she reads the telegrams aloud anonymously and opens the class for discussion.

Another teacher also uses the letter or telegram approach to evaluation, but asks that the telegrams describe the course to date.

Note: See also suggestion No. 109 on how to acknowledge mid-term feedback from students.

Limitations on Use of Suggestion

Discipline: None
Course Level: None
Course Size: None
Mode: None

File name: 107

IF YOU WANT TO:

- Know if the class is understanding you or not
- Receive feedback midway through the course

YOU MAY WISH TO CONSIDER:

Inviting a colleague or member of the TIES staff to conduct an oral evaluation with your students midway through the semester and report the results back to you.

This procedure was developed by Joseph Clark of the University of Washington and has been tried out in several classes at Berkeley. After introducing the visiting evaluator to the class you must leave the room for 30 minutes. The evaluator asks the students to form small groups of five or six who are then instructed to take 10 minutes to: (1) select a spokesperson/recorder; (2) decide on something in the course they find very helpful; (3) decide on something they would like changed in the course.

While the groups are discussing the issues, the evaluator circulates among them making certain that the groups are working on the task. At the end of 10 minutes, the spokesperson from each group reports the results of each group's discussion which the evaluator records on the board. After all groups have reported, the evaluator summarizes what the overall consensus seems to be and asks for clarification on any areas in which there was disagreement between the groups.

The comments on the board are recorded on paper to be shared with the instructor by the evaluator later that day.

See also suggestion No. 109 on how to acknowledge mid-term feedback from students.

Limitations on Use of Suggestion

Discipline: None
Course Level: None
Course Size: Under 100-150
Mode: None

File name: 108

IF YOU WANT TO:

- Know if the class is understanding you or not
- Know if the students are bored or confused
- Get feedback on your teaching
- Develop a more interesting style of presentation

YOU MAY WISH TO CONSIDER:

Videotaping your class.

Several Berkeley professors have had their classes videotaped. One zoology professor has had his lectures videotaped many times. "The first time was a shattering experience," he says, "but it is the most effective kind of feedback you can get. I have found videotape invaluable for getting rid of annoying mannerisms, for learning to vary the speed of my delivery and to put more expression and greater clarity into my explanations."

If you want to arrange to have your class videotaped call the Educational Television Office (2-2535). Guidelines for observing a videotape of your teaching are available in a short publication entitled, Using Systematic "Live" and "Videotaped" observation in TA Training which can be obtained either from TIES (2-6392) or from the Television Office.

Limitations on Use of Suggestion

Discipline: None
Course Level: None
Course Size: None
Mode: Lecture primarily

File name: 109

IF YOU WANT TO:

- Know if the class is understanding you or not
- Know if the students are bored or confused

YOU MAY WISH TO CONSIDER:

Conducting and responding to a mid-term evaluation by students.

A critical aspect of conducting a midsemester evaluation is to let students know that their comments have been thoughtfully considered. At the very next class meeting, thank the students for their comments and their suggestions and give a brief, non-defensive account of those suggestions you can use this term, those which must wait until the next time you teach the class and those which you either cannot or, for pedagogical reasons, will not change.

Students often make valuable suggestions or point out problems that can be easily remedied. A professor of forestry conducted a midterm evaluation in which he received numerous complaints that he talked too fast during lecture. At the beginning of the class period immediately following the evaluation, he playfully handed out signs which said "Slow down" "Go more slowly" and "Too Fast!" to students scattered around the room. During the lecture, students were encouraged to put up a sign when they felt he was lecturing too rapidly.

Of course, not all student suggestions can or should be followed. For example, you may not give students as much guidance as they would like because you are consciously trying to foster their intellectual independence. The important thing is to acknowledge their suggestions and to give a brief explanation as to why you cannot follow all of their suggestions.

Limitations on Use of Suggestion

Discipline: None
Course Level: None
Course Size: None
Mode: None

3)

Appendix J

Sample Consultant's Letter after Consultation

UNIVERSITY OF CALIFORNIA, BERKELEY

BERKELEY · DAVIS · IRVINE · LOS ANGELES · RIVERSIDE · SAN DIEGO · SAN FRANCISCO · SANTA BARBARA · SANTA CRUZ

TEACHING INNOVATION AND EVALUATION SERVICES

BERKELEY, CALIFORNIA 94720

Professor
Dept. of

Campus

copy

Dear Professor

Thank you so much for participating in the Teaching Evaluation Consultation Service. I enjoyed meeting and talking with you about some of the challenges of teaching During our discussion you mentioned some useful ideas which we will incorporate as suggestions to be relayed to colleagues who wish to strengthen those corresponding aspects of their courses.

We explored several ideas related to particular topics that were of special concern to you or the students. The first topic was controlling the material -- including your sense of pressure and lack of time; and the comments by several students that you covered too much material too fast for them to assimilate it. Among ideas we discussed were: (7061) focusing your lectures on a few main points; (7095) breaking up your lectures into 10-minute segments; (7091) beginning and ending your lectures with a summary statement; (7032) outlining your lecture on the chalkboard as it develops to serve as a "brake".

We also discussed the possibility of your preparing your own textbook, or taking preliminary steps toward it, including preparing your own book of readings or (7078) a detailed course syllabus. Both of these could be sold to students at cost and could relieve some of the burden presently put on your lectures. I mentioned the possibility of applying for a grant to get some assistance in doing this. I'm enclosing a copy of our grant brochure. We also talked about (7077) preparing handouts and (7113) dividing your course material into 3 levels: the Basic, the Recommended and the Optional. Lectures might concentrate on the Basic, particularly since studies indicate that students tested on a typical college lecture one week after the lecture recalled only 17 per cent of the lecture's content.

We also talked about (4157) getting feedback on one's lectures by periodically borrowing students' notes or audiotaping. I also suggested giving the students a brief stretch after about 45 minutes.

I am enclosing an issue of Teaching at Berkeley which discusses several ways of getting to know students' names.

Continued....

Page 2

Fuller descriptions of some of the ideas we talked about are attached for your consideration. These suggestions are meant to be stimuli for your own ideas, rather than "pat" answers, of course. Also, it should be noted that these suggestions are in a "first draft" stage of development.

Because we are still in the development stages of this project, it will be helpful for us to learn which ideas, if any, seem most useful to you. This information will assist our understanding of any corresponding changes in student ratings this Winter Quarter. Any suggestions you might have for improving our interviewing procedures would also be most welcome.

I will be contacting you in February about the best time to administer Winter 1981 evaluations in your course. Again, many thanks for your interest and participation. If, after reviewing the materials, you have any questions or comments, just give me a call at 2-6392 or 2-1811. I look forward to hearing from you early in Winter Quarter about coming to observe one of your lectures.

Best wishes,

Robert C. Wilson
Director

RCW:mb

Enclosures

7061 7075 4157
7095 7077 72625
7091 7113
7082

PS I'm enclosing two additional ideas which we didn't discuss (72210 + 72211).

Appendix K.

Client Faculty Sample Description

Table K-1

Rank and Discipline of Client Faculty

Discipline	Rank					
	Lecturer	Assistant Professor	Associate Professor	Professor	Total	Sample %
Humanities	0	2	2	1	5	11%
Social Sciences	1	1	1	2	5	11%
Physical Sciences	0	2	9	1	12	27%
Biological Sciences	1	1	7	6	15	33%
Interdisciplinary	0	2	0	6	8	17%
Total	2	8	19	16	45	
Sample Percent	4%	18%	42%	36%		
Campus Percent	10%	18%	16%	56%		

Table K-2

Class Size and Division of Clients' Classes

Size	Division			
	Lower	Upper	Graduate	Total
1-35	2	11	4	17
36-100	5	15	2	22
101 or larger	4	3	0	7
Total	11	29	6	46
Sample %	24%	63%	13%	
Campus %	11%	46%	43%	

Note: Mean class size equals 61.

Appendix L: Background Documents

This appendix includes the 1969 "Instructions to Appointment and Promotion Committees" issued by President Charles J. Hitch, requiring for the first time the submission of evaluations of the candidate solicited from students, concerning the candidate's teaching effectiveness. It also includes a 1970 statement of President Hitch emphasizing the requirement that student evaluations be included in recommendations for promotion.

CHANCELLORS:

Attached herewith you will find an official copy of the newly revised Instructions to Appointment and Promotion Committees. This version is effective immediately. It supersedes the version which appears in the May 1968 edition of the Faculty Handbook, and which was issued by the President on December 31, 1965.

As you know, the process of revision has involved lengthy consultation with Academic Senate committees, both at campus and Universitywide levels, discussions in the Council of Chancellors, and the efforts of a joint ad hoc faculty - administrative committee.

These Instructions play a very important role in the maintenance of the quality of the University. I believe that some significant improvements have been made in the Instructions. I know they will continue to serve us well.

Charles J. Hitch

cc: Members of the Academic Council
Members of the University Committee on Budget and Interdivisional Relations

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INSTRUCTIONS TO APPOINTMENT AND PROMOTION COMMITTEES

A. Purpose and Responsibility of the Review Committees

The quality of the faculty of the University of California is maintained primarily through objective and thorough appraisal, by competent faculty members, of each candidate for appointment or promotion. Responsibility for this appraisal falls largely upon the review committees nominated by the Committee on Budget and Interdepartmental Relations and appointed by the Chancellor or his designated representative. It is the duty of these committees to ascertain the present fitness of each candidate and the likelihood of his pursuing a productive career. In judging the fitness of the candidate it is appropriate to consider his professional integrity as evidenced by his performance of his duties. (A useful guide for such consideration is furnished by the Statement on Professional Ethics issued by the American Association of University Professors. A copy of this Statement is appended to these instructions for purposes of reference.) Implied in the committee's responsibility for building and maintaining a faculty of the highest excellence is also a responsibility to the candidate for just recognition and encouragement of achievement.

B. Maintenance of the Committee's Effectiveness

(1) THE MEMBERSHIP, DELIBERATIONS, AND RECOMMENDATIONS OF THE REVIEW COMMITTEE ARE STRICTLY CONFIDENTIAL. The chairman of an appointment or promotion committee should remind members of the committee, and others whom it is essential for the committee to consult, of the confidential nature of the assignment. This should be kept in mind for arranging for all written or oral communications; and when recommendations with supporting documents have been forwarded, all copies or preliminary drafts should be destroyed.

(2) The whole system of review by appointment and promotion committees depends for its effectiveness upon each committee's prompt attention to its assignment and its conduct of the review with all possible dispatch, consistent with judicious and thorough consideration of the case.

(3) The Chairman of the review committee has the responsibility of making sure that each member of the committee has read and understands these instructions.

C. Procedure

(1) General - Recommendations for appointments and promotions normally originate with the Department Chairman. His letter of recommendation should provide a comprehensive assessment of the candidate's qualifications together with detailed evidence to support this evaluation. The letter should also present a report of the Department Chairman's consultation with the members of his Department, including any dissenting opinions. In

addition to his letter of recommendation, the Department Chairman is expected to assemble and submit to the Chancellor an up-to-date biography and bibliography, together with copies of research publications or other scholarly or creative work.

(2) Appointments - The Department Chairman should include in his documentation opinions from colleagues in other institutions where the nominee has served and from other qualified persons having firsthand knowledge of the nominee's attainments. Extramural opinions are imperative in the case of proposed appointments to tenure status of persons from outside the University.

(3) Promotions - Promotions are based on merit; they are not automatic. Achievement, as it is demonstrated, should be rewarded by promotion. Promotions to tenure positions should be based on consideration of comparable work in a man's own field or in closely related fields. The Department and the review committee should consider how the candidate stands in relation to other people in his field outside the University who might be considered alternative candidates for the position. It is also recommended that the Department Chairman supplement the opinions of his colleagues within the Department by letters from distinguished extramural informants.

(4) Assessment of Evidence - The review committee shall assess the adequacy of the evidence submitted. If in the committee's judgment the evidence is insufficient to reach a clear recommendation, the committee chairman, through the Chancellor, shall request amplification. In every case all obtainable evidence shall be carefully considered.

If, according to all obtainable evidence, the candidate fails to meet the criteria set forth in Section d. below, the committee should recommend against appointment or promotion. If, on the other hand, there is evidence of unusual achievement, and exceptional promise of continued growth the committee should not hesitate to endorse a recommendation for accelerated advancement.

D. Criteria for Appointment and Promotion

The review committee shall judge the candidate with respect to the proposed rank and duties, considering the record of his performance in (a) teaching, (b) research or other creative work, (c) professional activity, and (d) university and public service. In evaluating the candidate's qualifications within these areas, the review committee shall exercise reasonable flexibility, balancing, where the case requires, heavier commitments and responsibilities in one area against lighter commitments and responsibilities in another. The review committee must judge whether the candidate is engaging in a program of work that is both sound and productive. As the University enters new fields of endeavor and refocuses its ongoing activities, cases will arise in which the proper work of faculty members departs markedly from established academic patterns. In such cases

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the review committees must take exceptional care to apply the criteria with sufficient flexibility. However, flexibility does not entail a relaxation of high standards. Superior intellectual attainment, as evidenced both in teaching and in research or other creative achievement, is an indispensable qualification for appointment or promotion to tenure positions. Insistence upon this standard for holders of the professorship is necessary for maintenance of the quality of the University as an institution dedicated to the discovery and transmission of knowledge.

The criteria set forth below are intended to serve as a guide in judging the candidate, not to set boundaries to the elements of performance that may be considered.

(1) Teaching - Effective teaching is an essential criterion to appointment or advancement. Under no circumstances will a tenure commitment be made unless there is clear documentation of ability and diligence in the teaching role. In judging the effectiveness of a candidate's teaching, the committee should consider such points as the following: the candidate's command of his subject; his continuous growth in his field; his ability to organize his material and to present it with force and logic; his capacity to awaken in students an awareness of the relationship of his subject to other fields of knowledge; his grasp of general objectives; the spirit and enthusiasm which vitalize his learning and teaching; his ability to arouse curiosity in beginning students and to stimulate advanced students to creative work; his personal attributes as they affect his teaching and his students; the extent and skill of his participation in the general guidance and advising of students. The committee should pay due attention to the variety of demands placed on instructors by the types of teaching called for in various disciplines and at various levels, and should judge the total performance of the candidate with proper reference to his assigned teaching responsibilities. The committee should clearly indicate the sources of evidence on which its appraisal of teaching competence has been based. In those exceptional cases where no such evidence is available, the candidate's potentialities as a teacher may be indicated in closely analogous activities.

It is the responsibility of the Department Chairman to submit meaningful statements, accompanied by evidence, including evaluations of the candidate solicited from students, concerning the candidate's teaching effectiveness at lower-division, upper-division, and graduate levels of instruction. If such information is not included in the letter of recommendation, it is the review committee chairman's responsibility to request it, through the Chancellor.

No single set of satisfactory criteria can be prescribed; however, among significant types of evidence of teaching effectiveness are the following: (1) Opinions of other members of the candidate's Department, particularly if based on class visitations, on attendance at public lectures

or lectures before professional societies given by the candidate, or on the candidate's results in courses prerequisite to those of the informant. (2) Opinions of students. (3) Opinions of graduates who have achieved notable professional success since leaving the University. (4) Number and caliber of students guided in research by the candidate and of those attracted to the campus by his repute as a leader. (5) Development of new and effective techniques of instruction.

(2) Research and Creative Work - Evidence of a productive and creative mind should be sought in the candidate's published research or recognized artistic production in original architectural or engineering designs, or the like.

Publications in research and other creative accomplishment should be evaluated, not merely enumerated. There should be evidence that the candidate is continuously and effectively engaged in creative activity of high quality and significance. Work in progress should be assessed whenever possible. When published work in joint authorship (or other product of joint effort) is presented as evidence it is the responsibility of the Department Chairman to establish as clearly as possible the role of the candidate in the joint effort. It should be recognized that special cases of collaboration occur in the performing arts and that the contribution of a particular collaborator may not be readily discernible as his by those viewing the finished work. When the candidate is such a collaborator it is the responsibility of the Department Chairman to make a separate evaluation of the candidate's contribution and to provide outside opinions based on observation of the work while in progress. Account should be taken of the type and quality of creative activity normally expected in the candidate's field. Appraisals of publications or other works in the scholarly and critical literature provide important testimony.

Textbooks, reports, circulars, and similar publications normally considered evidence of teaching ability or public service, or contributions by candidates in the professional school faculties to the professional literature, the advancement of professional practice or of professional education, should be judged creative work when they present new ideas or incorporate scholarly research.

In certain fields such as art, architecture, dance, music, literature, and drama, distinguished creation should receive consideration equivalent to that accorded to distinction attained in research. In evaluating artistic creativity, an attempt should be made to define the candidate's merit in the light of such criteria as originality, scope, richness, and depth of creative expression. It should be recognized that in music, drama, and dance, distinguished performance, including conducting and directing, is evidence of a candidate's creativity.

(3) Professional Competence and Activity - In certain positions in the professional schools and colleges, such as architecture, business administration, dentistry, engineering, law, medicine, etc., a demonstrated distinction in the special competences appropriate to the

field and its characteristic activities should be recognized as a criterion for appointment or promotion. The candidate's professional activities should be scrutinized for evidence of achievement and leadership in the field and of demonstrated progressiveness in the development or utilization of new approaches and techniques for the solution of professional problems. It is the responsibility of the Department Chairman to provide evidence that the position in question is of the type described above and that the candidate is qualified to fill it.

(4) University and Public Service - The faculty plays an important role in the administration of the University and in the formulation of its policies. Recognition should therefore be given to scholars who prove themselves to be able administrators and who participate effectively and imaginatively in faculty government and the formulation of departmental, college, and University policies. Services by members of the faculty to the community, state, and nation, both in their special capacities as scholars and in areas beyond those special capacities when the work done is at a sufficiently high level and of sufficiently high quality, should likewise be recognized as evidence for promotion. Similarly, contributions to student welfare through service on student-faculty committees and as adviser to student organizations should be recognized as evidence.

E. The Report

(1) The report of the review committee forms the basis for further review by the Budget Committee and for action by the Chancellor and by the President. Consequently, it should include an appraisal of all significant evidence, favorable and unfavorable. It should be specific and analytical and should include the review committee's evaluation of the candidate with respect to each of the qualifications specified above. It should be adequately documented by reference to the supporting material.

(2) The review committee has the responsibility of making an unequivocal recommendation. No member should subscribe to the report if it does not represent his judgment. If the committee cannot come to a unanimous decision, the division of the committee and the reason therefor should be communicated either in the body of the report or in separate concurring or dissenting statements by individual members, submitted with the main report and with the cognizance of the other committee members.

Appended for reference on the following page is the AAUP Statement on Professional Ethics referred to in the first section of these instructions.

American Association of University Professors Bulletin
Vol. 52, p. 290-291, 1966
(Reprinted) Vol. 55, p. 86-87, 1969

Statement on Professional Ethics
(Endorsed by the Fifty-Second Annual Meeting)

The Statement

I. The professor, guided by a deep conviction of the worth and dignity of the advancement of knowledge, recognizes the special responsibilities placed upon him. His primary responsibility to his subject is to seek and to state the truth as he sees it. To this end he devotes his energies to developing and improving his scholarly competence. He accepts the obligation to exercise critical self-discipline and judgment in using, extending, and transmitting knowledge. He practices intellectual honesty. Although he may follow subsidiary interests, these interests must never seriously hamper or compromise his freedom of inquiry.

II. As a teacher, the professor encourages the free pursuit of learning in his students. He holds before them the best scholarly standards of his discipline. He demonstrates respect for the student as an individual, and adheres to his proper role as intellectual guide and counselor. He makes every reasonable effort to foster honest academic conduct and to assure that his evaluation of students reflects their true merit. He respects the confidential nature of the relationship between professor and student. He avoids any exploitation of students for his private advantage and acknowledges significant assistance from them. He protects their academic freedom.

III. As a colleague, the professor has obligations that derive from common membership in the community of scholars. He respects and defends the free inquiry of his associates. In the exchange of criticism and ideas he shows due respect for the opinions of others. He acknowledges his academic debts and strives to be objective in his professional judgment of colleagues. He accepts his share of faculty responsibilities for the governance of his institution.

IV. As a member of his institution, the professor seeks above all to be an effective teacher and scholar. Although he observes the stated regulations of the institution, provided they do not contravene academic freedom, he maintains his right to criticize and seek revision. He determines the amount and character of the work he does outside his institution with due regard to his paramount responsibilities within it. When considering the interruption or termination of his service, he recognizes the effect of his decision upon the program of the institution and gives due notice of his intentions.

V. As a member of his community, the professor has the rights and obligations of any citizen. He measures the urgency of these obligations in the light of his responsibilities to his subject, to his students, to his profession, and to his institution. When he speaks or acts as a private person he avoids creating the impression that he speaks or acts for his college or university. As a citizen engaged in a profession that depends upon freedom for its health and integrity, the professor has a particular obligation to promote conditions of free inquiry and to further public understanding of academic freedom.

CHANCELLORS:

On Thursday, November 12, I am holding press conferences in San Francisco in the morning and in Los Angeles in the afternoon to release my statement on Improvement of Undergraduate Teaching and Use of Instructional Resources. The statement will also be carried in full in this week's University Bulletin.

I want you to have advance notice of this release because I think it will create great interest both inside and outside of the University community. You will recall our several discussions about faculty effort and output and the need for improvement of undergraduate teaching, with particular emphasis on freshmen and sophomores. I consider this statement another and important step along the road to general improvement of these areas.

I ask that you accomplish the purposes of this statement as quickly and fully as possible.

Charles J. Hitch

cc: Administrative Officers, Office of the President
Principal Officers of The Regents
Members of the Academic Council
Student Body Presidents

President Hitch's Statement on Improvement of Undergraduate Teaching

The University of California has faculties which include scholars among the most eminent in the world. It provides graduate and professional education of high quality. It renders great service to this State and to the Nation. During the past two decades, in response to national needs for greatly increased numbers of college and university teachers and professional school graduates, and for greatly expanded training and research in science and allied fields, the University accelerated the development of its capabilities in graduate and professional education and in research, so that in these areas it has well justified the trust placed in it by the people of California. It must and will continue to justify that trust.

But the University of California has another great responsibility: it must meet the educational needs of able undergraduate students. Here the University as a whole is not doing as well as it could and should be doing, although there are some notable examples of interest in and devotion to undergraduate teaching within the University. Like most large institutions which offer strong programs of graduate instruction, however, the University now needs to give renewed attention to the quality of its programs for undergraduates. There must be greater commitment of faculty of all ranks to the instruction of undergraduate students. There must be determined efforts throughout the University to live up to this commitment through a variety of positive actions.

I am asking each Chancellor to develop a plan of action appropriate to his campus for strengthening or reaffirming the commitment to undergraduate education, including the steps to be taken to carry out the plan. The precise nature of the plans may be expected to vary from campus to campus and even from department to department within the same campus, but each campus must act to ensure that undergraduate students receive education of the highest possible quality. The teaching program must significantly involve faculty of all ranks in instruction at all levels, including the lower division (I recognize that in some parts of the University this is already accepted practice).

I am asking the Chancellors to submit their preliminary plans for review by January 22, 1971. Completed plans must be approved and put into effect by the opening of the Fall Quarter, 1971.

Strengthening our commitment to undergraduate instruction cannot be accomplished by University-wide formulas or by mere quantitative standards. There are certain guidelines, however, which I expect to be followed.

1. Efforts must be directed toward curricular reforms intended to assure that course offerings and schedules are optimally designed to meet the educational needs of students. It is the responsibility of each department chairman or equivalent officer, with the participation of his faculty and review by the dean and the appropriate Senate committees, to assure that the curriculum under his jurisdiction meets this standard and that it is subject to constant review and evaluation. (This responsibility is set

forth in the University's policy statement on "Duties of Department Chairmen" and in the guidelines for the administrative supervision of academic programs which were issued by my office in September, 1970.)

2. Chairmen are to assign teaching responsibilities in such a manner as to ensure substantial involvement of faculty of all ranks in instruction at all levels, including the lower division. Responsibilities of faculty members which are related to the instructional program, such as scheduled instructional sessions with students and the holding of office hours, must of course be carried out as announced.

3. There must be the opportunity for every freshman to participate, during at least one quarter of the academic year, in a small-group class directly taught by a faculty member in one of the professorial ranks.

4. Evaluation and documentation of teaching performance must be substantially improved, in accordance with the revised "Instructions to Appointment and Promotion Committees" issued in August, 1969. I strongly recommend that the following suggestions be considered, and I would welcome additional suggestions from the campuses:

   a. Departmental or college teams, reporting to the dean through department chairmen, should be established to evaluate the quality of teaching of faculty members at all levels, giving particular attention to faculty being considered for promotion to tenure rank. Methods of evaluation might include such practices as class visitation, study of teaching materials such as reading lists, term paper and problem assignments, lecture notes, and examinations, and interviews with current and former students; the methods judged appropriate will vary from department to department.

   b. Organized efforts for the evaluation of teachers by students should be encouraged. The "Instructions to Appointment and Promotion Committees" require that student evaluations be included in recommendations for promotions; organized efforts to secure such evaluations would facilitate compliance with this requirement.

   In this connection, I am instructing that the annual bio-bibliographical statement form which is distributed by my office be amended to provide opportunity for faculty members to include brief descriptions of any systematic efforts to improve instruction in which they have been engaged during the year.

5. Chancellors should institute detailed studies of how their campus teaching resources are being used -- by department, by level of instruction, and by faculty rank -- as a basis for effective action to improve the quality of undergraduate education.

6. Chancellors should allocate their limited resources in ways that will make a substantial permanent commitment to improving the quality of education. They should encourage continuing instructional experimentation along every promising line, even though not all experiments can be expected to succeed. One way of offering such encouragement will be to provide matching funds from campus resources for the special Regents' Undergraduate Instructional Improvement Grants, to be available in 1971-72.

The task here set for the University is worthy of our best talents and collective efforts. I am confident that this endeavor will have the support of all sectors of the University community.